

2987.C 2

LUCRETIIUS

817
3864

ON THE

NATURE OF THINGS.

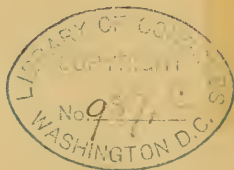
Translated into English Verse

BY

CHARLES FREDERICK JOHNSON,

WITH

INTRODUCTION AND NOTES.



NEW YORK:
DE WITT C. LENT & COMPANY,

451 BROOME STREET.

LONDON: *SAMPSON LOW, SON & MARSTON.*

1872.

PA6483
E5J6

Entered according to Act of Congress, in the year 1871, by
DE WITT C. LENT & CO.,
In the Office of the Librarian of Congress, at Washington.



Stereotyped at the
WOMEN'S PRINTING HOUSE,
Corner Avenue A and Eighth Street,
New York.

TO
H. A. J. MUNRO
OF
TRINITY COLLEGE, CAMBRIDGE,

TO WHOM ALL ADMIRERS OF

LUCRETIVS

OWE A DEBT OF GRATITUDE FOR HIS LABORS IN THE EMENDATION OF THE

TEXT AND THE INTERPRETATION OF THEIR AUTHOR, THIS

WORK IS RESPECTFULLY INSCRIBED BY THE

Translator.

INTRODUCTION.



WE have but slight personal notice of Lucretius, and what we have is not well authenticated. Although he is not unfrequently mentioned in the literature of his own age, the only account of his life that has reached us cannot be traced to any authority near his own time. This is in the additions made by Jerome to the Eusebian chronicle, who states that the poet Titus Lucretius was born B.C. 95; that having been driven mad by a love potion, and having composed several books in his lucid intervals, he died by his own hand, at the age of forty-four. But as the first recorded notice of this is nearly four hundred years after his death, as the circumstances recorded are grossly improbable, and there is not the slightest allusion to them in any contemporary authority, it may be dismissed as unworthy of credit, and as tending only to give false impressions. Donatus, in his life of Virgil, mentions that Lucretius died on the day Virgil assumed the *toga virilis*, at the age of thirty-nine. If this be true, he died about October, B.C. 55, and to all appearances suddenly. These are the sole circumstances recorded of his life; nor is anything whatever known of his family. What is certain is, that the great poem by which alone he is known was left unfinished at his death; that it was published early in the year B.C. 54, in the state it was left by the author, and to all appearance without any alteration.

Lucretius is thus known to us solely as the author of a great didactic poem—as the exponent of the ancient atomic philosophy of Democritus, and the fervent teacher of the moral doctrines of Epicurus.

The poem “*De Rerum Naturâ*” is the sole result of his life. It throws but faint light upon his history. Nothing is known of his education, career, ordinary place of residence, or his fortune. He is only known as a Roman citizen of noble extraction; from his intimate acquaintance with the Greek poets and philosophers, it is inferred that he studied at Athens. In his personal relations, he is known only from the dedication of his work to C. Memmius, who was prætor in 58, and bore a prominent part in the politics of the day, combining the characters of a politician, a man of letters, and a man of pleasure. The work has thus the form of a personal address, not that to a patron, but on terms of equality as a friend. The repeated personal appeals give vivacity to the poem, and enable the reader to feel that he is not so much following a written argument as listening to the eloquent voice of a living man earnest to produce conviction.

The poem was designed to be, (says Professor Munro, in the introduction to his edition of the work,) a complete exposition of the physical system of Epicurus, not for the sake of the system itself, or barren love of knowledge, but for a moral purpose, to free the minds of men from what he regarded as the greatest of all ills, the fear of death, and the fear of the gods, by explaining to them the true “*nature of things.*” To Lucretius, the truth of his philosophy was all-important; to this the graces of his poetry were made entirely subservient. To us, on the other hand, the truth or falsehood of his system is of ex-

ceedingly little consequence, except as it is thereby rendered a comparatively better or worse vehicle for conveying the beauties of his language or the graces of his poetical conceptions. Is, then, the Epicurean system well or ill adapted to these purposes? As a poet can scarcely be the inventor of a new system of philosophy, Lucretius could hardly help adopting some one of those which were then in vogue; if not the Epicurean, then the academical, or peripatetical, or stoical. With the first two, a poet could do nothing; and the stoical, for all purposes of poetry, was incomparably inferior both in its physical and ethical doctrines to that of Epicurus. Compare their one wretched world, their monotonous fire, their method of destroying and creating anew their world, with the system of Nature unfolded by Lucretius, grand and majestic, at least in its general outline. Then look at their sterile wisdom, and still more barren virtue, with their repudiation of all that constitutes the soul of poetry. Lucretius, on the other hand, can preach virtue, temperance, and wisdom, with as earnest a voice as any of your stoics, and what inexhaustible resources does he leave himself with his *alma Venus* and *dux vitæ diva voluptas*. Lessing says Lucretius speaks with Epicurus when he would extoll pleasure, and with the porch when he would praise virtue. But this is what he can and does do. Virtue, at all events, he can praise on the broad grounds accepted by the general feelings of the world, without adopting the narrow and intolerant views of his adversaries.

Lucretius possessed, in as high degree as any Latin poet, two qualities which a poet can ill dispense with, the power of vividly conceiving and of expressing his conceptions in words. This has enabled him to master the great outlines of the

Epicurean universe of things, and by a succession of striking images and comparisons drawn from the world of things going on before his eyes, and those of his readers, to impress this same outline on their minds. The two first books appear to be quite finished, and to have received almost the last touches of the author, are devoted to a very complete and systematic account of the nature and properties belonging to the two great constituents of the universe, atoms and void. Given to him this universe in working order, there is much that is striking, much that may be true, much, at all events, that Newton accepted, in this description. We, of course, care not for its scientific value or truth, but for its poetical grandeur and effect upon our imagination, and in this respect we are most amply satisfied.

The third book is likewise highly finished, and shows great power of sustained and systematic reasoning. Here, too, if his premises are granted, his arguments are striking and effective, and carried through with the energy of fanatical conviction. The poetry, pathos, and satire of the latter portion of this book are of a very high order. The fourth book is in a much less complete condition than those which precede it. Yet in the first part, in which the Epicurean theory of images is expounded, he wrestles with its gigantic difficulties, and often overcomes them with singular power, energy, and controversial address. In truth, the most obvious objections to the doctrine of images apply almost as strongly to the Newtonian theory of the emission of light, which in spite of them so long maintained its ground. The latter portions of the book, which explain the operations of the other senses, the way the mind and will are excited, are much more sketchy and unfinished. The concluding

two hundred lines are very peculiar, and display a satirical vein as powerful and much more subtle than Juvenal. The fifth book is also very unequal, and evidently unfinished. The part in which he describes the motion of the sun and moon will not afford much gratification. But more than half the book, particularly the latter part, is in his grandest manner. Nothing in Latin poetry surpasses, if it even equals, these verses in grandeur, sublimity, and varied beauty. The sixth book is unequal, like the fifth. The beginning is unsatisfactory and confused. Then follows a description of the nature and workings of thunder and lightning, the formation of clouds, carefully elaborated, but affording little room for the highest virtues of poetry. But they show quickness of observation, and power of describing what is observed, vivacity of narrative, fine perception of analogy, and much ingenuity of speculation. What follows is not so satisfactory. The poet had to include in a limited space a variety of questions, selected at hap-hazard, some of them trivial, and some treated out of all proportion to the subject-matter. The description of the plague of Athens concludes the book, taken chiefly from Thucydides. It is manifestly unfinished; and though it contains much noble poetry, it suffers from the unavoidable comparison with the austere beauty and simple grandeur of its original, which the poet has not always understood, and from which he has sometimes departed without good cause.

In style and language Lucretius manifestly adopted a somewhat archaic tone, occasioned mainly by his admiration of Ennius and Nevius, and the old tragic poets Pacuvius and Attius. In Greek literature his taste seems to have carried him to the older and most illustrious writers. To judge from

his imitations, he most loved and admired Homer, Euripides, Empedocles, Thucydides, and Hippocrates. Plato he would seem to have known something of, from more than one passage. Epicurus, of course, he studied for other purposes than style. Ennius he wished to be regarded as his master and model in Latin poetry. Free from all jealousy and empty pretension, he took every opportunity of acknowledging his obligations to those to whom he felt indebted. First and foremost to Epicurus, who showed the path which leads to truth and reason, without which all other gifts were vain ; and after him to Democritus and the other early Greek philosophers. Empedocles receives his homage as one of them, but mainly as he gave him the best model of a philosophical poem. Lucretius, thus to all appearances, stood aloof from the swarm of contemporary poets, and left them to fight and quarrel among themselves, as even the best of them seem to have been ready to do. We cannot picture him to ourselves as joining in the lampoons on Cæsar, much as to all appearance he disapproved of his policy.—

Munro's Lucretius—Introduction.

We take the following account of the personal characteristics, the philosophy, moral teaching, and poetical genius of Lucretius from Professor Sellar's chapters on these subjects in his work on *The Roman Poets of the Republic*, and to which we beg to refer for fuller illustration : "As has been said, the spirit and purpose with which Lucretius expounds the philosophy of nature was to raise human life out of the ignorance and consequent misery of superstition. It is the constant presence of this practical purpose that imparts to his words that peculiar tone of impassioned earnestness of which there is no parallel in ancient literature. Of his personal characteristics none is more

prominent than the strong sense he entertained of the greatness and importance of the work in which he was engaged, the delight which he took in the exercise of his art, and the passionate earnestness with which he carried on his work of inquiry and composition. This is something more than the delight of a poet in his art, a philosopher in his abstract thought, or man of science in the observation of nature. It combines all these and goes beyond them. It is the passion of his whole intellectual and moral being concentrated on the greatest subject of contemplation for the greatest practical object, the reformation of the world.

“From many indications of the poem it may be gathered that Lucretius, while leading the life of a contemplative student, lived also much in the open air and among many varied scenes of nature. This appears from his clear representation of the aspect of outward things, and in the use of expressions implying that the object had passed under his own eye. The distinctness of his illustrations from outward objects shows that he possessed the clear eye of a naturalist, no less than the susceptibility of a poet, to the life and grandeur of nature.

“His intellectual sympathies are strongly marked, and no trait is more characteristic than the dogmatic confidence with which he maintains his own views, his admiration for the masters of his own school, combined with intellectual contempt for the school most opposed to Epicureanism at Rome. Heraclitus, regarded by modern students of philosophy as the subtlest and most suggestive thinker before the time of Plato, is described by him in much the same terms as a modern positivist might apply to a great metaphysician, ‘renowned because obscure.’ The traditional opposition of Democritus and Herac-

litus, the laughing and weeping philosophers, passed into the more modern systems of epicureanism and stoicism. The believers in atoms and the believers in the fiery element of Heraclitus, became thus more widely separated by the real and radical variance in their whole theory of human life. The scorn which the Stoics entertained for his master was repaid in full measure by Lucretius. Though ardent and intense, his intellectual sympathies, like his doctrines, were one-sided and limited. The whole enthusiasm of his nature breaks forth in admiration of Epicurus, whom he praises in the most extravagant terms. Still there is more real affinity of nature between Lucretius and another philosopher whom he names in terms of love and veneration, Empedocles of Agrigentum, who furnished him the model of his poem.

“In common with all great imaginative thinkers, Lucretius was profoundly moved by the impulse of reverence; but this feeling was in him absolutely divorced from belief in the religious traditions of his country. The feelings of awe and veneration which the ideas of religion awake in others were called forth in him by the contemplation of the majesty of Nature, and the great minds by which her secrets have been revealed. The faculty by which truth is discovered he regarded as the divinest faculty in man. And in assigning to Homer the pre-eminence above all poets, he is introduced not as the poet of war and national glory, but as the interpreter of nature. //

“Lucretius betrays scarcely any trace of national pride or patriotic enthusiasm, contrasting in this respect with Virgil. His poem breathes the spirit of a man altogether indifferent to the ordinary sources of pleasure and pride among his contemporaries. Living in one of the most momentous eras of

antiquity, he was only repelled by its energetic and turbulent activity. While the sympathies he expresses are not those that might have been expected in a Roman writer, while he alone among his countrymen inherited some of the old speculative genius of Greece, yet more than most Romans he possessed the moral temper and heart of the great Republic. No extant Roman writer, with the exception perhaps of Tacitus, represents with so much power the gravity, the dignity, the fortitude of his race. But while he regards all human weakness with mixed pity and scorn, he has a depth of human sympathy and pathos equalled perhaps by no ancient writer except Homer—and no writer but Homer has sounded as deeply the sources of melancholy in human life.

“It is, however, in his devotion to truth that Lucretius more than in any other quality rises clearly above the level of his countrymen and his age. He thus combines what is greatest in the Greek and Roman mind, the Greek ardor of inquiry and the Roman manliness of heart. He is a Roman poet of the time of Julius Cæsar, animated with the spirit of the early Greek philosophers. He unites the speculative passion of the dawn of ancient inquiry with the real observation of its meridian; and he has brought the imaginative conceptions of nature that gave birth to the earliest philosophy into harmony with the Italian love of the living beauty of the world.”

Although Lucretius claims for himself the high offices of a philosophical teacher, moral reformer, and a poet, it is chiefly as a poet and moralist that he has been admired in modern times. But his philosophy deserves notice, as it will be seen that his moral teachings and his poetry stand in close relations to his abstract doctrines; and, if his poem adds nothing to the

knowledge of scientific facts, it throws a powerful light on one phase of the ancient mind. It is a witness to the eager imagination, the searching thought of that early time, which endeavored by individual inquiries, and the intuitions of genius, to explain a problem probably beyond the reach of the human faculties—to solve at a single glance secrets of nature which have only slowly and partially been revealed to the patient labors of many generations.

Lucretius makes no claim to original discovery in philosophy. He limits his discussion to the practical purpose of raising life above the terrors of superstition, the source of which he traced to ignorance of certain facts of nature. Without going here into a detailed statement of his argument, we may state the conclusion to which we are led, that the main purpose of the poem is fully answered. It presents a full and clear view of the philosophy that satisfied the mind of Lucretius. What then is the interest and value of the work, considered as a great argument in which the plan of nature is explained, the position of man in relation to that plan determined? Is it a maze of ingeniously wove error, or a true movement of the ancient mind, marking, indeed, its limitations, but testifying also to its native strength and greatness. Has the meaning of the controversy between science in his infancy and the pagan mythology in its decrepitude passed away, as from the vantage-ground of nineteen centuries the blindness of both combatants is apparent? May we not discern that, amid the confusion of this battle in the night, great issues were at stake? that truths most vital to human well-being were involved? that the contest is still perpetuated in modern controversies, between

the claims of positive science and the requirements of the religious instincts ?

All the ancient systems of physics were one-sided, built upon mere assumption. They endeavored to explain, by some simple hypothesis, all physical, all moral, all divine existence. This explanation was supposed to be within the reach of the instinctive sagacity of the human mind, acting upon the obvious sensible appearances of things.

The inadequacy of such speculations is apparent. But we may state some points in which the argument most obviously fails in premises, method, and results. The ancient, as well as modern inquirer, was met at starting with the question, On what faculty, or faculties, is the foundation of our knowledge built? Is it obtained originally through the exercise of the reason, or the senses, or through their combined and inseparable action? In answer to this, Lucretius distinctly asserts that the senses are the foundation of all our knowledge. Yet the data of his own philosophy, the "atoms," are represented as lying beyond the reach of this primal source of knowledge; and thus, on his own principles, he has no warrant for their existence or properties. The first principles of his philosophy are thus seen to be *à priori* assumptions, or immediate inferences from outward appearances. But his assumptions, if established, are entirely inadequate to explain the facts of creation. The order of nature now subsisting is declared to be the result of the manifold combination of atoms through infinite time and space; but the process is conceived in the most shadowy way. To pass from the abstract to the concrete, to account for the production of a single thing, much less for the order and life of nature, the atoms of Democritus are as little available as the

watery element of Thales, or the fiery element of Heraclitus. But in Lucretius the difficulty is concealed by a latent assumption. A sort of creative capacity is given to his primary elements, entirely inconsistent with the blind and dead mechanism on which his physical philosophy is professedly based. He assumes the presence of a secret faculty in atoms, distinct from their other properties. It is only on the assumption of a creative power that any meaning or coherence can be given to his explanation of the mode in which all things have been formed from the concourse of lifeless and senseless elements.

The weakness as well as the power of ancient science lay in the perception of analogies. Lucretius was not only much under the influence of the old analogical method of reasoning, but shows great power and originality in its application. Thus, his explanation of our mundane system is guided by the analogy of the human body. Not only does he speak poetically of the earth as the creative mother, and ether as the fructifying parent, but his whole conception of creation is derived from a supposed resemblance of the properties of our celestial and terrestrial system to those of living beings. With the utmost hardihood of assertion and inference, unsupported by observation or experiment, he was often as much in error as was possible to be. But the amount of information possessed by different ages or by different men is no criterion of their relative intellectual powers.

Even the intellectual life of antiquity is but partially revealed to us. But in no ancient writer is it more clearly seen than in Lucretius. If for nothing else, his poem would be valuable to us as a witness to the ardent and disinterested curiosity felt long ago to penetrate the secrets of nature, and as af-

fording examples of the clear, varied, minute observation which ministered to that curiosity.

But Lucretius was not a mere poet, casting into graceful language the interesting results of thought. He was a real student both of nature and man, and from his stores of information we may learn not only his errors but the happy guesses and pregnant suggestions of ancient science. Thus, for instance, his doctrines of elemental atoms and images have a real relation to the more substantial theories of modern times. Moreover, the questions vitally affecting the position of man in the world, which are suggested or discussed by Lucretius, are parallel to questions which have risen into prominence in connection with the increasing study of nature. Most conspicuous among these is the relation of physical inquiry to religious belief. Objections were urged against such inquiry in ancient times, on the ground of its impiety and unbelief. Just as there are found in modern times those who reprobate the audacity and insufficiency of reason, there were those in the time of Lucretius who denounced the inquiries into physical phenomena as dishonoring immortal things by mortal words.

The views of Lucretius on the nature and origin of life, the progressive advance of man from the rudest condition, by the exercise of his senses and accumulated experience, his denial of final causes, his resolution of all knowledge into the intimations of sense, his materialism and consequent denial of immortality, and his utilitarianism in morals, all present striking parallels to the opinions of one of the great schools of modern thought, and one passage on the preservation and destruction of species looks like a faint poetic anticipation of a theory which has attracted much notice in the present day.

It would be more unjust to compare ancient and modern religion than even ancient and modern science. Yet it is not uninteresting or useless to observe certain tendencies that are brought to light in modern controversy, already anticipated under totally different conditions. More tolerance may perhaps be felt for the denial of Lucretius, in an age when a corrupt and decaying superstition, with its unworthy views of the nature of God and man, was opposed to the intimations of natural reason, and a true sense of human dignity, than for the dogmatism of extreme partisans in the present day, who from a spirit of irreverence, or a spirit of untruthfulness, still endeavor to make the apparent divergence between true religion and true science irreconcilable.

THE SPECULATIVE IDEAS IN LUCRETIUS.

It is in the thorough grasp of great ideas, and his application of them to the living world in its moral and natural aspects, that the speculative greatness of Lucretius consists. The philosophy of the poem ultimately rests upon the most certain of all our conceptions, that of universal law and order in nature. The starting point of the system, "that from nothing nothing can spring," is itself an inference from a recognition of this condition. The fact of universal order is supposed to result from the immutable principles of atoms. But the idea of law is prior to the condition of all the principles he enounces on the nature and properties of matter. In no ancient author do we find the certainty and universality of law so frequently and so strongly expressed. The cardinal truth which Lucretius proclaimed was that creation was no work of

chance, or the capricious exercise of power, but arose out of certain regular and orderly processes, dependent upon certain primal conditions of which no further account can be given.

A certain power or force, analogous to that of volition in man, is conceived to be inherent in the primal atoms, by means of which creation is able to break from the chains of fate into a more free development. Only on the assumption of this original force is creation conceived possible. The idea of law in nature, as conceived by him, is not the same as that of invariable sequence of phenomena. It implies at least the further idea of power, and this leads up necessarily, though not consciously realized by him, to the wider and higher idea of will. His conviction of the certainty and universality of law, though antagonistic to the popular religions of antiquity, is in no way incompatible with the convictions of modern Theism.

The idea of law further moulded his convictions on human life, and imparts to his poetry that contemplative majesty with which it is pervaded. Man is under the same law, and is made free by accepting its conditions. A sense of security is thus gained for human life, a sense of elevation above its weaknesses and passions, and the courage to face its inevitable evils. But this absolute reliance on law does not act on his mind with the depressing influence of fatalism. Man is made free by knowledge and the use of his reason. Notwithstanding the original constitution of his nature, he can still live a life worthy of the gods. The idea of law gives unity and elevation to the whole poem, and enables him to apprehend in all the processes of nature a greater presence than is suggested by the outward appearances of things.

It is further to be observed how his conception of the eter-

nity and infinity of his primordial atoms and space supports him in his antagonism to the popular religion. The immensity of the universe is declared incompatible with the constant agency and interference of the gods. This, while setting aside the gods of ancient mythology, really involved a latent sense of omnipotence. It is a step, at least, in advance towards a higher and truer conception of the attributes of Deity. The power of this conception is also seen in the poet's deep sense of the littleness of human life, called forth by the ever-present sense of the Infinite and Eternal. But this, while it gives a feeling of the pathos of human life, does not lead to cynicism and despair, but fortifies him to suppress all personal complaints in the presence of ideas so great and awful.

The abstract properties of atoms are not mere arbitrary assumptions. Law, change, infinity, individuality, are the substantial truths of which the primary doctrines of the atomic philosophy are the shadows. The sum of the philosophy of Lucretius is a recognition of the unity, the diversity, the order, and life of nature. But there is, further, all that is involved in the idea of an organic whole, and to this whole new attributes are attached, inconsistent with the principles of the atomic philosophy.

In emancipating himself from the religious traditions of antiquity, Lucretius did not escape the power of an idea, rooted not only in all past thought, but in the depths of human consciousness, the idea of God. Though the truth of the idea was neither consciously accepted nor consciously denied by him, there is yet, in his conception of nature, the idea of a concealed Omnipotence pervading the whole. This conception is with him as much a religious as a speculative and practical idea.

It rises above the old mythological modes of thought, establishes itself upon them as a new principle, but is not entirely independent of them. Though, more than any other ancient writer, Lucretius was free from the direct influence of religious traditions, his thoughts were shaped by the same imaginative impressions that gave birth to the old mythologies. Under the influence of these associations, in the invocation to the poem, he identifies the mysterious power of nature with the goddess of love, and the mythical ancestress of the Roman people; and he invokes this power as the source of all life in the world, and of all grace and accomplishment in man, to aid him in his task and give beauty to his words. There is in this passage, at least, an acknowledgment of a living power, independent of and superior to man, to whose sway, whether harsh or benignant, man, in common with all other creatures, is subject.

It is this conception of nature which brings the abstract philosophical system of Lucretius into complete harmony with his poetical feelings and his moral convictions. The poetry of the living world is thus breathed into the dry bones of the atomic theory. The contemplation of nature satisfies the imagination of Lucretius, by her aspects of power and life, immensity and beauty; but with his poetical emotion there is a deeper feeling interfused. There is through all his poem a pervading solemnity of tone, as of one awakening to the consciousness of a great invisible power in the world. His language in many places implies a latent sense of a truth inconsistent with the negative principles of his philosophy.

This inconsistency may be accounted for by the fact that he often leaves the beaten track of epicureanism for the higher, but less definite, paths to which the religious enthusiasm and

ardent genius of Empedocles had borne him. But the inconsistency may be accounted for on other grounds. For, though the mechanical view of the universe may be accepted by the understanding, it has never been acquiesced in by the higher speculative faculty which combines the feelings of the imagination with the insight of the reason. The imagination which recognizes the presence of an infinite life and harmony in the world rises to the recognition of a creative and governing power, which it cannot help endowing with consciousness and will. The acknowledgment of this Power was at least an advance on the superstition and idolatry of the popular religion. It enabled the poet to contemplate human life with some sense of security and elevation, and imparted a more earnest feeling to his enjoyment of the beauty of the world. His belief is not atheistic nor pantheistic; it is not definite enough to be theistic. It is rather the twilight between an old and a new faith, "When it was not yet morn, but the gray twilight of dawn."—Il. viii. 483.

THE MORAL TEACHING OF LUCRETIUS.

There is no necessary connection between the atomic philosophy and that view of the end and object of life which Lucretius derived from Epicurus. By the ordinary Epicurean, his philosophy was valued chiefly as affording a basis for the denial of Divine providence and the immortality of the soul. But there is a wide difference between the ordinary Epicurean and that serious and solemn view of human life which was first given to the world in the poem of Lucretius. Epicureanism in its earliest form was the expression of a character as unlike as

possible to that of Lucretius. It was a doctrine suited to the easy social and literary life which succeeded the great political career—the energetic ambition and creative genius which ennobled the earlier Athenian life.

It is a strange sign of moral confusion of his time to see the ethical doctrines of Lucretius emanating from the denial of the highest hopes of mankind. Few writers of antiquity have presented a purer or more solemn view of human life, or were more profoundly impressed with the serious import and mystery of our being, yet he denies the foundation of religious belief with all the zeal of religious earnestness.

He reproduces the calm, unimpassioned doctrines of Epicurus in a new type, earnest, austere, and ennobled, enforcing them, not for the sake of ease or for the love of pleasure, but in the cause of truth and human dignity. Although no new principle or maxim of conduct appears in his teaching, the view of life presented by him was really something new in the world. The spirit with which Lucretius contemplated the world was different from that of any other man of antiquity, especially different from that of his master in philosophy. To one life was a scene of enjoyment, to the other it was the sad and tragic side of the august spectacle which all nature presents to the contemplative mind. This difference in the spirit, rather than the letter of their philosophy, is to be attributed in some degree to this, that Lucretius was a Roman of the antique type, inheriting the brave endurance of the great Republic; partly to the imaginative contemplation which he shares, not with any of his countrymen, but with a few great thinkers of every age.

Partly, too, this new aspect of epicureanism was due to the

reaction of his nature from the confusion and insecurity of the times in which he lived. While the pomp of armies impressed his imagination, he entertained a deep sense of the inhumanity of war, strange in a Roman of that or any age. Although his nature was of the firm Roman fibre, although deeply imbued with the philosophy of Greece, and, like all great thinkers, not free from the influence of his time, he was one of the most conspicuously original men whom Rome produced—the man who in thought and feeling rose most clearly above the range of his age and country.

The moral teaching of the poem may be described rather as an active protest against various forms of evil, than as the proclamation of any positive good. Hence, his tone is often more that of a stoic than of an epicurean—a proof, as has been remarked by Professor Munro, of the inward identity of the two systems. In resistance to common forms of evil they were at one, and in the positive good to which he aspired his spirit is more stoic than epicurean. While his sense of the dignity of human nature was stronger than his regard for human happiness, yet, with the strength of stoicism, his philosophy enabled him to cherish humaner and more general sympathies with life.

With Lucretius, the great evil of life is superstition. But while every line of his poem is a protest against the religious errors of antiquity, he shows a feeling of true reverence for, and recognition of, what appeared to him most holy and divine in man. He denounces the errors of popular religion as a violation of the majesty of the gods. While his belief in the gods is expressed in shadowy outline and poetical symbolism, it is clear that he recognizes both an orderly, mysterious, all-

pervading power in nature, and also the ideal of a purer and serener life than that of earthly existence. Though his denial extended not only to all the fables and false conceptions of the old mythology, but to the doctrine of Divine providence recompensing men either here or hereafter for their actions, yet this denial in him is not to be judged in the spirit with which the denial of a personal God would be judged in modern times. He could not reconcile his conception of law and order with any conception he could form of the Divine action on the world. His deep sense of human rights, and sympathy with human feelings, rebelled against the capricious action of gods to be propitiated by sacrifice. In elevation of feeling, and truth of conception, Lucretius rises not only above the popular mythology, but in some way above all but the loftiest minds of antiquity.

The practical use of the philosophy of Lucretius is, first, to inspire confidence in the room of an ignorant and superstitious fear in the course of nature ; second, to show what human nature needs, so as to clear the heart, by knowledge of artificial desires and passions, and open the mind to natural enjoyments. No doctrine is enforced in the poem with more sincerity of conviction than the dignity of plain and natural living ; the vanity of the appliances of wealth, their inability to give real enjoyment to either body or mind. But no writer of antiquity is less of an idealist than Lucretius ; none, either ancient or modern, whose words are more truthful and unvarnished ; none who has shown more independence of external things, more real scorn for the pomps and pleasures of the world.

The passion of love assumed great prominence in the Roman world in the age of Lucretius. With this phase of life, so alien

to the dignity of Roman character, Lucretius had no sympathy. Though no Roman writer showed a profounder reverence for the natural affections, none has treated the claims of passion and sentiment with more austere indifference.

The chief interest which attaches to his moral teaching arises from his intensity of feeling, sincerity of conviction, and independence of view. A modern reader may sympathize with much of his spirit without resting in any of his conclusions; may recognize in him a rare courage and consistency of thought, a real superiority to the weakness and vanity of life, a firm faith in the law and order of the universe, and in his protest against the popular religion may see the undeveloped capacity of a better belief.

The chief form of activity of his age was politics and commerce, pursued with no other principle than the lust of personal aggrandizement. He thus saw, in the active interests and pursuits of the world around him, the worst types of human evil. Hence, a life of peace, not of energy, became his ideal.

The definite results of his philosophy, while they cannot possibly influence modern opinion, are yet of interest, as showing the independent conclusions on the most vital subjects which the course of ancient thought and life forced on one of the most earnest men and consistent thinkers of antiquity.

POETICAL STYLE AND GENIUS OF LUCRETIUS.

Although the subject of Lucretius, and his method of treating it, is uncongenial to the purposes of poetry—which is little suited to the slow process of investigation—the poem, when read consecutively, notwithstanding the unpoetical nature

of much of the detail, produces the impression of a pervading passion and inspiration. His poetical style is chiefly marked by a freshness and fulness of meaning, and by a daring use of metaphorical expressions. Few poets convey so much meaning by the use of single words expressive of the full and literal truth of things. So, too, he conveys a deep and solemn sense of human life by the grave and almost literal fidelity of his language. Few great poets have indeed been more sparing in the use of mere poetical ornament. The earnestness of his speculative and practical purpose restrains all exuberance of fancy. His imaginative analogies are more often latent in single expressions than drawn out at length. But the few which he has elaborated, unlike most of the transient and fanciful imagery of poetry, stand out, as has been said,* "with the solidity of the finest sculpture," to embody some deep and powerful thought for all time.

But it is as the interpreter of Nature in the more familiar aspects of human life that Lucretius has employed his power of poetical feeling and expression. More than any ancient, or perhaps than any modern poet, he has given a true and great utterance to the majesty and power of nature. Nature however, the life of the world, does not appear to him as an abstraction, or as a vast system of forces and laws, but as a living power, analogous to the active and moral energies of man. He shares the same sympathy with the life of nature, the same vivid sense of wonder and delight in her familiar aspects, the same imaginative perception of her innermost meaning, that led the early Greek mind to people the world with the living forms

* Prevost-Paradol, *Nouveaux Essais*.

of the old mythology, and which has been felt anew by the great poets of the present century.

As the contemplative poet of human life, Lucretius displays a power of feeling and penetration equally deep and original, but infinitely less buoyancy and freshness of spirit. He is deeply impressed with the thought both of the dignity and littleness of our mortal state. His imagination is involuntarily moved by the pomp and grandeur of affairs, while his strong sense of reality keeps ever present to his mind the conviction of the vanity of outward state, the weariness of luxurious living, and the miseries of ambition.

His poem shows that he was a diligent student of the great works of earlier times, as well as a most original thinker and poet. He has, in common with Homer, the clear and varied observation of the outward aspects of nature, and something also of his deep and true insight into the mind and heart of man. His accurate observation of facts as the ground work of historical and political reflection, his masculine sense and contempt for superstition, remind the reader of some of the most marked characteristics of Thucydides.

With all his affinities to some of the greatest men of earlier times, he has also much in common with the spirit and genius of modern times. In his contemplation of human life, he combines the profound feeling of Pascal with the speculative elevation of Spinoza. The loftier tones of his poetry may be compared with the sustained dignity and majesty of Milton. His sympathy with nature, at once fresh and imaginative, is more like the feelings of the great poets of the present century than the general sentiment of ancient poetry. His strong intellectual and poetical feeling is united with some of the rarest

and noblest moral qualities—with great fortitude, earnestness of feeling, unswerving love of truth, a manly and genuine tenderness of heart. And while it is not to be forgotten that he used his great powers of heart, understanding, and genius in support of a cause which is now seen to be most fatal to human happiness and advancement, it must be remembered that he lived at a time when the most truthful mind might have despaired of the Divine government of the world, and might have honestly felt it was well to escape at any cost from the burden of Pagan superstition. As has been said by the great modern historian (Mommsen), his unbelief came forward, and was entitled to come forward, with the full, victorious power of truth, and therefore with the full vigor of poetry, in opposition to the prevailing faith of hypocrisy and superstition.

HOW LUCRETIUS HAS BEEN ESTIMATED.

Standing, as Lucretius did (we quote from Professor Munro's Introduction), entirely aloof from what would most excite the sympathies of his contemporaries, there is not much to show what reception his poem met with from his countrymen. It sufficiently appears, however, that he and Catullus were justly esteemed the two greatest poets of their age. Yet, there can be no doubt that his work came into the world at a time very unfavorable for the fame of its author. He would take no part in the great movement then in active progress, which ended in producing the works of Virgil, Horace, and Ovid, and fixed once and forever the standard of Roman poetical taste. The splendor of their reputation threw into the shade that of their greatest predecessors—Ennius, Lucretius, and Catullus.

Virgil was fifteen years of age when Lucretius' poem was given to the world. At an age, then, to be fully impressed with its style and manner; and perhaps the highest eulogy which has ever been passed on him is that constant imitation of his language and thought which pervades Virgil's works from one end to the other. Catullus gives frequent proofs of imitation. Horace shows that he had carefully studied him. And Ovid, in his "Metamorphoses," and elsewhere, has paraphrased whole passages of his poem. He was not known to Dante and Petrarch, but Tasso has imitated parts of his poem.

The Italian scholars of the fifteenth century admired no Latin poet more than Lucretius, Virgil alone excepted. The illustrious French scholars of the sixteenth century, Lambinus, Scaliger, Turnebus, pronounced him one of the greatest if not the greatest of Roman poets.

Spenser, in the fourth book of the "Fairy Queen," has given an exquisite paraphrase of the address to Venus; Milton, and I believe Shakespeare, not unfrequently borrowed from him thoughts and phrases. In our days he has obtained high praise from Wordsworth and Coleridge. The critics of Germany have showed little sympathy with him, with the brilliant exception of Goëthe. In England, the most recent account of the philosophy and poetry of Lucretius, that of Professor Selar, is at the same time the fullest and the most favorable.

To conclude, Professor Munro says in another place ("Journal of Classical and Sacred Philology," March, 1804), it would hardly, perhaps, do violence to the taste of the present age to call Lucretius the greatest of extant Latin poets. Like the rest of his countrymen, he is not a great creative genius. He owed much to the old epic and tragic Roman poets, and still

more to the Greeks, especially Empedocles. But he has merits of his own, unsurpassed in the whole compass of Latin poetry. It has often struck me that his genius is akin to that of Milton. He displays a wonderful depth and fervor of thought, expressed in language of singular force and beauty; an admirable faculty of clear, vigorous, and well-sustained philosophical reasoning; and a style equal in its purity and correctness to that of Terence, Cæsar, or Cicero, and superior to that of any writer of the Augustan age.

The foregoing is taken mainly from the Chapters on Lucretius, in Prof. Sellar's interesting work on the Roman Poets of the Republic. It suffers here from the necessity of condensation and omission. For its due appreciation I would refer to the work itself, where it is justified and supported by copious extracts from the original. I beg to express my thanks to Prof. Sellar, and also to Prof. Munro, for their kind permission to make such use of their materials as I might see fit. My obligations to Mr. Munro's admirable edition of Lucretius have been constant; although a first draft of my translation was completed before I had the advantage of his labors, it has been revised with his work constantly in hand.

Lucretius, it must be admitted, presents formidable difficulties to a translator, inasmuch as his subject-matter is not suited for poetical treatment, and much of the details (as has been said, "mathematics put into rhythm") no art of the poet could make attractive. The translator must do the best with them that he can, though sensible of their dreariness. It is only in exceptional parts, where he pauses in the career of his argument to give expression to his views of nature and human life, that his poetical powers have full scope.

Little need be said of my own work. It has been the pleasing occupation of many years—of more than I am now willing to recall. A first draft was completed when as yet no classical author had found a translator in this country. I have, in general, aimed to be faithful to my original. In one long passage, at the close of the Fourth Book, I have given a free paraphrase, rather than any approach to a literal rendering. I have endeavored to make my work worthy of my author—who has inspired me with an almost personal interest—who was one of the most sincere and elevated characters of antiquity; whose ardent, but tender and sympathetic soul deserved a better fate than to be condemned to a philosophy without consolation, and a religion without hope. If I have succeeded in making him known to a wider circle than would have been likely to have sought him in the original, I shall be fully compensated for the time and labor devoted to my work.

But though that labor has brought, in a great measure, its own reward in the pleasure it has afforded, I have not the less been sustained by the hope, which, though it prove fallacious, I trust will not be deemed presumptuous, of adding something to the literature of my country.

THE TRANSLATOR.

OWEGO, NEW YORK, *May*, 1871.

BOOK I.

COSMOGONY.

Invocation.—Dedication to Memmius.—Statement of Subject.—Superstition.—Sacrifice of Iphigenia.—Necessity of Sound Philosophy.—First Principles.—Nothing can come from Nothing.—Matter Eternal.—Of the Void.—All Nature consists of Matter and Void.—Of Time.—Atoms Solid and Indestructible—Have Parts—Their Parts Minima.—Refutation of the Doctrine of Heraclitus, that Fire is the Element of All Things—And of that of Empedocles, of Four Elements.—Description of Sicily.—Praise of Empedocles.—Refutation of the Doctrine of Anaxagoras.—The Universe Infinite.—Matter and Space Infinite—Limit Each Other.—How the World was Formed.—Against the Stoics.—Conclusion.

BOOK I.

MOTHER of Romans ! joy of men and gods,
Benignant Venus ! thou whose presence fills
All things beneath the gliding signs of heaven,
Throughout ship-bearing seas, corn-bearing lands—
Since 'tis through thy soft influence conceived
All living things rise to behold the light—
Before thee, Goddess ! thee ! the winds are hushed,
Before thy coming are the clouds dispersed,
The plastic earth spreads flowers before thy feet,
Thy presence makes the plains of ocean smile,
The sky shine placid with diffused light.
Soon as the vernal day unlocks the year,
And zephyrs breathe their fecundating breath,
The aërial birds, smit by thy genial power,
Goddess divine, blithe herald thy approach ;
The untamed herds o'er the glad pastures bound
And swim the rapid streams ; thus, by thy charms
Ta'en captive, all that lives with eager pant
Follow thy influence wheresoe'er it leads.
Then through all seas, the mountains and the streams,
The leafy home of birds, the verdant plains,
Infusing gentle love to every breast,

Thou causest glad renewal of their tribes.
Since thou alone all Nature rulest thus,
Nor without thee can aught to light arise,
Nor can aught joyous or aught lovely be,
Oh! be thou then companion to the verse
Which I for Memmius essay to frame
On the true form and nature of all things,
For him whom, Goddess, thou would'st have excel,
With every grace adorned. The rather, then,
Immortal grace give, Goddess, to my words,
And cause meanwhile that the fierce arts of war
Throughout all seas and lands, hushed to repose,
May rest. For thou alone with tranquil peace
Canst mortals bless, since Mars, potent in arms,
Rules war, who oft upon thy bosom sinks
O'erpowered and bound by love's eternal wound.
Thence looking up with rounded neck turned back,
And lips apart, feeding his gaze with love,
Supine suspends his breath upon thy mouth.
O'er him recumbent hang thy sacred form,
And thus pour thou from thy sweet lips sweet words,
Imploring, Goddess, placid peace for Rome.
For neither in our country's adverse hours,
Can I with tranquil mind this theme pursue,
Nor can a scion of the Memmian stock,
Be such time wanting to the common weal.

Now, Memmius, as I approach my theme, may you,
With mind unprepossessed, all care removed,

Apply attentive ears to reasoning sound,
Lest from my gifts, with faithful zeal arranged,
Despised ere understood, you turn away ;
For I propose deep dissertation on
The system of the heavens, and the gods,
And to unfold the elements of things,
Whence Nature all creates, sustains, and feeds,
To which again destroying she resolves ;
Which we are wont explaining to assume,
And call " creative principles " " begetting forms,"
" Matter," " prime bodies," and the " seeds of things,"
Since from them first as Elements things rise.

When human life lay prostrate upon earth,
Basely oppressed by Superstition dire,
That from the heavens her horrid front displayed,
O'erhanging mortals with a baleful gaze—
A Greek the first 'mongst mortals dared to raise
His eyes against the fiend and her resist.
Him not the fame of gods, nor lightning's glare,
Nor heaven reverberating thunder could restrain ;
But they the more in his intrepid soul
Excited proud desire to be the first,
To burst the bars of Nature's closed gates.
And thus prevailed his burning ardor, forth
Passing beyond the flaming bounds of space,
With fervid mind surveying the profound ;
Thence he brought back victorious unto us
What can exist, what not ; how powers in all

Owꝝ limits, hemmed by bounds profoundly fixed.
Thus in its turn is Superstition crushed ;
The victory makes us equal with the gods.

And here I fear lest you perchance should think
I'm entering on the elements of vice,
And would induct you in the path to crime ;
When oftener far foul Superstition hath
Produced accursed and most impious deeds.
As when in Aulis once the Grecian chiefs,
The flower of men, stained basely with the blood
Of Iphigenia virgin Dian's altar.
When o'er her charms the sacred veil was thrown,
That flowed divided down on either cheek,
She at the altar saw her father stand,
And near the priest with ill-concealed steel ;
While at the sight her countrymen shed tears,
She, mute with fear submissive, sought the earth ;
Nor in that hour could it avail her grief
That first she gave king a father's name.
All trembling, by the hands of men upborne,
She to the altar comes ; not that, due rites performed,
She may go thence attended by a choir
Of youths and maidens chanting nuptial songs,
But stainless, stained with blood, in age of love,
She falls a victim by a father's hand,
That winds may favor and the fleet depart.
Such and so great are Superstition's crimes.

Yourselves sometimes will seek escape from me,
Harrowed by terrors of the seer's words.
Full well thou may'st; for look how many dreams
And phantoms dire might they for you invent,
Subverting reason as the guide of life,
And palling all the future with grim fears.
But could men once a certain term perceive
To all their woes, they might perchance resist
To superstitious fears and priestly threats.
But now, no ground of sure resistance's left,
(Some endless punishment they dread in death,
All ignorant of the nature of the soul,
Whether born with us, or infused at birth,
Whether it, mortal, dies with us in death,
Or wanders after in hell's vast profound,
Or by a power divine, transferred to forms
Of animals as our Ennius sung—Ennius,
The first to gather an unfading crown
From banks of Helicon—a crown that shines
Resplendent still throughout Ausonian lands.
Though yet he paints in his immortal verse
The Acherusian courts, where neither souls
Of men nor bodies can endure, but pale
And wandering ghosts in wondrous guise appear,
And where, as he relates, the immortal shade
Of Homer, clothed in youth, rose on his path,
With tears fast flowing, words oppressed with sighs,
Nature's unveiled secrets 'gan disclose.

Wherefore we must the ruling cause explore,
That reigns above ; by reasoning sound, define
The laws which guide the courses of the stars,
The powers which act throughout the world's vast frame
And most of all, deep-prying must explore
The nature of the soul, and thinking mind,
And what the forms that on our vigils rise
When, racked by sickness, or oppressed by sleep,
We seem to see before us, and to hear
Voices of those long sunk in death, whose bones
The Earth holds silent in her cold embrace.

Nor am I not aware how difficult it is
With fulness to explain in Latin verse
The deep, obscure discoveries of the Greeks,
When I new terms for many things must frame
From pov'rty of our tongue—from novelty of theme ;
But not the less thy virtues me inspire,
And hoped-for pleasure of thy friendship dear,
Labor, however great to undergo,
In study to outwatch long nights serene,
Seeking the choice expression and the verse
That to your mind shall a bright light unfold,
And full all deep and hidden things reveal.

Those terrors, and that darkness of the mind,
Not by the sun's bright rays, arrows of day,
Can be dispelled ; rather by reasoning sound,
Unfolding Nature in her forms and laws.

First principle of which I thus announce,
“That nothing can from nothing come—not e’en
By power divine,”—though miserable fear
Oppresses men in that they much perceive,
The efficient cause of which they can’t discern.
But in this matter, when they’re brought to see
That nothing can from nothing come, they then
What follows thence more rightly will perceive,
And learn the origin whence all may come,
And all be done without the help of gods.

For if from nothing anything could spring,
All living things we see might take their birth
Indifferently from all, needing no seed.
Men from the sea would rise; the scaly tribe
Burst from the cloddy earth; the feathered fowl
From air, the lowing herds and savage beasts,
Chance-born, possess alike the cultured and the wild;
While fruits, no longer constant to their boughs,
Would spring from thorns as from Pomona’s tree.
Chance would rule all, since each could other bear,
Confusion endless Nature’s realm possess.
For were there not fixed generative seeds
What certain origin could there be for aught?
But now, since all from distinct seeds are formed,
Rise to the light where only seeds exist,
All cannot spring indifferently from all,
A secret principle controls their birth.

Why brings the Spring the rose, the Summer corn,
And humid Autumn the full-clustered grape,
If not that seeds in their fit time unfold,
And thus uprear the universe of things,
Each in its own propitious season meet?
Thus the life-giving Earth brings tender germs
In a safe season to the shores of light,
Which, if from nothing sprung, would sudden rise,
In place unfit—in inauspicious hour;
No principle existing that with genial power
Might ward their coming from a hostile shore.

Again, what need of space or time to grow,
If things from nothing could their forms uprear,
Since men full-grown from infants would start up,
And stately trees leap sudden from the Earth?
We know full well that none of these can be,
Since all with gradual increase swell and grow
From certain seeds, and proper nurture take,
In due proportion from appropriate store.
And further add, that without genial showers
The Earth could not her joyous fruits unfold.
Nor without food could animals subsist,
Their races propagate, or their lives transmit.
Nay, rather think full many elements,
Common to things, as letters are to words,
Than without elements anything can be.

Why does not Nature men of size produce,

To pass on foot the deep bed of the sea,
And tear down lofty mountains with their hands,
With length of life outlasting many an age ;
If not that fixed matter is prepared,
From which they spring, through a creative power,
Determining what may—what cannot be—
Confess that nothing then from nothing comes,
Since need there is to all of primal seeds,
From whence created, wherein dwells the power
To lift their bosoms to the wooing air ?

Why does the cultured field excel the wild,
And richer harvests to our hands supply,
But that in Earth the seeds of things are hid,
Which, as the share the fertile furrow turns,
We open to the sun and force to spring ?
For were there not, without our idle aid,
Things far more glorious would spontaneous rise.

Again, when Nature, as we see, dissolves
All things in death, in sooth she but resolves
Things to their elements, and naught destroys.
For were the elements themselves exposed
To sheer destruction by the shock of fate,
Things from before our eyes, on sudden snatched,
Would disappear without the need of force
Their parts to sever, or their ties dissolve.
But since there is in things something etern,
Made up of which the universe consists,

Until the force to shatter them arrives,
Or fermentation with its subtle powers
Invades their pores, and thus their forms dissolves,
Nature no death allows throughout her realm.

Besides, if all which time through wasting age
Removes, perished entire—its matter lost,
How then could Love through generation bring
The tribes of animals to renewed life?
Or how Dædalian Earth, when brought, sustain,
Supplying food through her creative powers?
Or how the native fountains and the streams
Far-winding pour their tribute to the sea?
How Ether feed the censor of the stars,
Since the long past eternity must have
Consumed sheer all things of mortal mould?
But since through ages past something endures,
Made up of which the universe consists,
Sure with immortal being 'tis endowed,
And nothing sinks in utter nothingness.

Were matter not eternal, and upheld
By ties of various strength, one shock would whelm
In one destruction all created things.
A touch for dissolution would suffice,
And slightest shock more than sufficient be
The bond of things to shatter and dissolve.
But since unequal ties their elements unite,
Matter eternal is; and all remains

Safe and intact until a force assails
Of power sufficient to dissolve their ties.
Again—again, nothing to nothing turns,
But all by dissolution render up,
Not more than this, their elements again.

Although the showers that Father Ether pours
Upon the bosom of the Mother Earth
Sink as they fall, and perish from our sight,
Hence goodly crops of grain spring up, and boughs
Grow green on trees and load themselves with fruit;
Hence are the races fed of men and beasts;
Hence joyous cities bloom with boys and girls,
And groves resound with the new song of birds;
The full-fed herds, weary through pastures glad,
Repose their ample forms upon the grass,
While drops distil from udders full distent;
Hence the new races sport their pliant limbs
Upon the tender herb, their youthful hearts
Made glad with milk, and joyous as with wine.
How then can aught we see perish entire,
Since Nature, working in perpetual round,
From one's destruction builds another up,
And with each birth joins a close neighbor, death?

Now, since I've taught that nothing can be formed
From nothing, nor again to naught return,
Lest you perchance my words distrust, because
You nowhere see the elements of things,

Learn now of bodies which you must confess
Exist in things, but yet nowhere can see.
First, when incited winds o'er ocean sweep,
Dispersing clouds, o'erwhelming mighty ships,
Or o'er the plains in rapid whirlwinds borne,
Strew them with trunks of trees uprooted rent,
Vexing the hills with forest-rending blasts—
So raves the wind, and howls with threatening roar—
Thus secret bodies sure exist in winds
Which sweep the sea, the land, the clouds of heaven,
And them tormented in swift whirlwinds hurl ;
Nor rage they less, nor devastate unlike
To gently flowing rivers, sudden made
A whelming torrent by the fall of rains
And rush of waters from the lofty hills.
See how it bears the uprooted woods along,
Nor can the ponderous bridges' strength sustain
The weight of waters, while the rushing stream
O'erbears its dykes, and, with resistless power,
Rolls rocks immense beneath the roaring flood ;
There raging most where most opposed, it spreads
Wide devastation round with deafening roar.
So raving blasts of wind comport and bear
Like to a mighty stream impetuous down,
Prostrating all opposed, and, shouldering before,
And seizing, bears them on in rapid whirls.
Sure then their bodies are unseen in winds,
Since thus they emulate the mighty streams
In which are bodies as well all can see,—

So various odors we perceive in things,
Yet naught material see the organ strike.
Nor heat, nor cold, nor sounds, can eye discern,
Though all of corpor'al nature must consist,
Since they the senses strike; for know, bodies
Alone can bodies touch, or touched be.

The garments hung on shores where billows break
Grow damp; spread in the sun soon dry again;
Yet can we not perceive the water come,
Nor see it flee by heat, since 'tis dispersed
In parts too small for any eye to see.

Time wastes by use the ring upon our hand;
The falling drop the stone; the iron share
Grows thin by stealth in fields where furrows turn;
The rock-paved streets are worn by passing feet;
And at our city gates the images
Of gods in brass show right hands fined away,
By reverent touches of the passers-by.
We see them lessened as thus worn away,
But what from them in time defined departs
Invidious Nature hides from every eye.
And what she adds by daily growth to things
No sharpness of the vision can detect,
Or diminutions by a slow decay;
As plain to see, since caverns deeply worn,
Where rocks impend o'er the corroding sea,
Show not the gnawing of each breaking wave:

For Nature acts on atoms hid from sight,
In secret working, but results reveals.

Nor yet are things shut in on every side,
By matter hemmed. A Void exists in things—
A truth to know of import great to guard
From wandering doubts trust in my words to give.
Space then exists, impalpable and void ;
For did there not, there could no motion be ;
Besetting matter would environ round
All things compact, opposing all advance,
And nought could yield for motion to begin.
But on all sides we varied motions see
Of varied things ; but they without a Void
Would not alone lack motion, but they could
Never have been by any means begot,
Since matter hemmed, confined, condensed, all would
Have dwelt forever in eternal rest.
However solid bodies may appear,
Void spaces they contain ; since water drips
In caves and grotts, and drops ooze out from rocks,
And all around with trickling moisture weeps.

The food of animals, by secretive powers,
Flows though the limbs and builds the body up ;
The sap of plants, through secret veins and pores,
From lowest root to topmost bough diffused,
Unfolds in blossoms and fair fruit displays.
Sound traverses closed doors and solid walls,

While stiffening cold strikes piercing through the limbs.
But were no void how could such bodies pass?
You needs must see it were impossible.

Why do some things excel in weight others
Of greater size? If equal matter be
In globe of wool and lead, why equal not
In what to matter most essential is—
Weight? Downward pressing to the void unknown,
The greater lighter than the less, thus proves
Existence of a void, the heavier still
Embracing less than light of spaces void.
Sure then exists, mingled in things, what we
Seek with sagacious mind and call a Void.

Now lest what some may feign divert your mind
From truth, I must anticipating meet
Objections specious and adroitly urged.
The waters yield, they say, to efforts of
The scaly fish, since its advance leaves space
Behind, whither the yielding waters flow.
Thus things can move by reasoning false deceived,
By mutual change of place without a void.
But how can the scaly brood begin advance,
Unless the waters yield them space, or how
They yield, when these are powerless to advance?
All things must thus lack motion, or we must
Admit a void as mingled up in things
That may allow of motion to begin.

+ When bodies joined on sudden leap apart,
Circumfluous air must fill vacated space ;
But howe'er swift it rush in circling streams,
Part after part successively must gain,
Nor can on instant occupy the whole ;
Feign not a condensation of the air,
Conclusions to escape, for that would make
A void where none, fill one that was before.
Not under such conditions could the air
Condense, within itself retire, without
A previous void. Objections harping you
May wear the time ; but, bound in reasoning's chain,
You must confess a void exists in things.

Why heap up argument to confirm my words?
These slight suggestions to sagacious mind
May well suffice. The rest you can divine.
As the hill-roving dog tracks out the prey,
When, keen of scent the sure trail once he's ta'en,
Thus inference you can draw, her lair invade,
And drag the truth reluctant to the light.

And now should weariness or sloth withdraw
Your mind, O Memmius, from the truth,
Take here my pledge from overflowing soul,
Such copious draughts, from copious fountains drawn,
My tongue shall drop in accents sweet the while ;
I fear lest age slow creeping on invade
My limbs and mine the seat of life, long ere

The sum of knowledge from one seed of truth
Can be in all its amplitude disclosed.

Now to resume, clothing in verse my theme :
All nature of two essences consists :
Matter and Void. The first by sense is proved ;
Without which firm foundation of belief
No standard there could be in hidden things,
To which referring we could truth confirm,
While motion proves existence of a void.
Distinct from matter and distinct from void,
An essence third to these is nowhere found.
Imagine what you will, if sensible to touch,
It must dimensions have, or small or great,
And swell the number of corporeal things.
Insensible to touch, dimensionless,
That no resistance lets for things to pass,
Can be but sheer vacuity and void.

Again, whatever acts, or passively exists
As acted on, must in some place exist,
To act or suffer, and must body be ;
What place affords is void ; there's naught besides
That sense can apprehend or thought conceive.
All else are properties or accidents.
Of these two self-subsisting substances,—
Essential properties we call all those
Which to their subjects so inhere that they
Can severed only by destruction be—

As weight in stones and ardent heat in fire,—
Since losing these their subjects cease to be ;
While those whose presence or departure leaves
Unharm'd their subjects, accidents we call—
As poverty or wealth, freedom or servitude.

Time in itself exists not ; but the sense
Of time comes from what's done in time ; events,
Revealing thus the present, future, past.
But time, as self-existent and removed
From things in motion, all in fixed rest,
Cannot be apprehended or conceived.

What poets tell of Helen's ravishment,
The Grecian gathering and the fall of Troy,
Regard them not as self-subsisting things ;
Since all the generations those events befel
Irrevocable time hath swept away ;
And what succeeding to that region came,
What differing fortune Teucer's sons befel,
Are rightly termed events of it or them ;
For were there not some substance sure of things,
Were there no space, or place for them to act,
The flame of love by Helen's form inspired,
Soft gliding to the Phrygian Paris' breast,
Had never lighted up that war renowned,
Nor wooden horse, with its portentous birth
Of armed Greeks had never sacked Troy.
Thus you may see that acted things are not

Like Matter, self-existent, or the Void
Of founded natures ; but they rather well
Are called events of matter and of void.

Bodies in part are first beginnings, then ;
In part they are by union formed of these.
These seeds, first principles, no force can quench,
Triumphant ever in solidity,
Though difficult of credence that in things
Aught solid there can be ; when oft we see
Through closed barriers sounds and lightnings pass,
See rigid steel glow and grow soft in fire,
The molten rocks leap up with fervid flame,
The flinty bronze flow liquid, tamed by heat ;
Cold permeate the cup silver or gold
With water filled, held brimming in the hand,
And dew-like moisture gather on without.
Thus naught in Nature solid seems to be.

But since right reason and the truth of things
Compel belief, attend while I unfold
That there are things solid, etern, and which
Are seeds of things, since from them all proceeds.

First, since a two-fold Nature's found to be
Of two dissimilar things—Matter and Void,
Each self-existent, in itself distinct,
Each by its nature limit must the other.
Where empty space exists, called here the Void,

No Matter is ; where Matter is, no Void.
Nor can created things contain a void,
Save by the favor of embracing walls
Of matter that must needs then solid be,
And be eternal when all else dissolves.
Again, were there no void, the universe
Would solid be. Were there no bodies fixed
To hold their own in space, all would be void.
Thus vacant space and bodies alternate,
And mark the Void from Full, since there exists
No perfect fulness, and no perfect void.
These bodies, too, no outside blows can reach,
No force invade ; can neither yield in parts,
Nor minished be ; not penetrable are
By moisture, heat, or cold, by whose assaults
Things are destroyed ; since still in them
A void is found, while in these bodies none.

The more things have of void more quick they yield
Assailed ; but if, as taught, first bodies are
Of solid texture, not admitting void,
They then perforce must needs eternal be.

Were matter not eternal, long ere this
Annihilation would have swallowed up
All things created ; and the things we see
Must have from nothingness to being sprung.
But since, as proved, nothing from nothing comes,
And naught to naught returns, primordials, strong

In their simplicity, eternal are,
And at their final hour things but dissolve,
Materials to afford for recreating things ;
Not else could Nature through all time endure.

Again, had not Nature certain limits fixed
To dissolution, elements themselves
Would so through ages past have waned away,
That naught from them could have attained its prime,
Since all is sooner wasted than restored ;
The long drear night of time through ages past
Must with corroding tooth have all consumed.
But since we see all things renewed in their
Appointed time, with fixed laws for all
By birth and growth to reach their flowery prime,
Bounds to destruction must be surely fixed.

Though seeds, moreover, solid must be deemed,
Things by their union formed may well be soft—
As water, air, vapor, and plastic clay,
Since they contain a void ; but what could give
To flinty rocks, were atoms soft, their strength,
Since Nature then would firm foundation lack ?

Moreo'er, were there no limits set to breaking
things,
What forms them now must have through time en-
dured,
By dangers unassailed ; but ill it sorts

To think, were all with fragile natures framed,
They could till now unharmed have endured
Through ages, vexed with unnumbered shocks.
But since appointed bounds of life and growth,
Each in its kind, have been assigned to things ;
And by the laws of Nature 'tis decreed
What each can do, and what again cannot ;
Nor does aught change, but constant all remains—
As various birds, each in their order, show
The marks and colors propiarte to their kinds,
Most surely immutable must atoms be.
For could they change or vanquished be by aught,
Uncertain it would be what could arise—
What not, what limits there could be for all.
Not thus through endless ages of revolving time
Could various races reproduce their kind,
The nature, instincts, habits of their sires.

Moreo'er, since there's an extreme part of that
Which is already least sight can perceive,
That extreme part itself can have no parts,
Minutest part, itself inseparable,
Of atoms, elements, from which things are formed.
Apart from them they no existence have,
But cleave to that from which they can't be torn.
For in themselves they nothing are to sense ;
To mind, parts ultimate of elements.
Primordials, then, solid and single are,
Compacted of those close-cohering parts,

Massed out of them, not by their union formed,
But strong in everlasting singleness.
Nature, reserving these as seeds of things,
Permits in them no minish or decay ;
They can't be fewer, and they can't be less.

For were there not somewhere true minima,
Least things were then of infinite parts composed,
To every part a half, so without end.
What difference, then, between the small and great !
The universal whole and its minutest part
Would equal be—both infinite alike.
But since 'gainst this right reason militates,
Nor can the mind conceive, perforce confess
There must be things that are not dowered with parts,
True minima ; and since there are, first seeds,
Since built of them, are solid and etern.

Again, were Nature wont to break up things
To minima, materials she would lack
Them to rebuild by her creative powers.
For how could ultimates, unendowed with parts,
The motions, weights, affinities possess,
To generative matter due for forming things.

Hence, those who Fire the primal matter deem
Make fire alone constituent of things,
Wide wander from the truth—of whom
Heraclitus is chief, and leads the van,

Renowned, because obscure ; by fools esteemed—
Not by Greek sages who what's true require—
(For shallow wits admire what comes concealed
In misty verbiage, and in terms obscure ;
Deeming that truth that deftly takes the ear,
With sonorous phrase and glittering tinsel decked.
Were all from fire create, whence then could come
The infinite variety of things ?
It little can avail to rarefy
Or to condense the fiery element.
The parts the nature of the whole must have,
Fiercer condensed, more languid when diffused,
Nor other change can know ; how then could rise
All Nature's rich variety from this ?
And did they in their scheme admit a void
They might conceive their fire condensed or rare ;
But since this suits but ill their theory,
They mumble and decline a void to own.
Fearing the difficult, they thus miss the true,
Perceiving not that all without a void
Condensed would one sole body constitute,
Nor from it e'er could emanations flow,
As now the radiant sun far-darting sends
Its light and heat and radiance from afar.
And if, perchance, they think that fire can change
Its nature when combined in forming things,
E'en fire they would annihilate, and make
Sheer nothingness the origin of things.
For what by change transcends appointed bounds

Must by the change annihilated sink ;
For something must inviolate remain,
Lest all in utter nothingness be whelmed,
All re-arise and grow from nothingness.

But since there are undoubted elements
Which give to nature uniformity,
Whose presence, absence, or arrangement new
Can change all things, yet be themselves unchanged,
'Tis sure these elements cannot be of fire ;
For what imports to add or to detract
From that, or change the order of its parts,
Since fire it is, and fire what it creates.

The truth is here : there certain bodies are
Whose concourse, motion, combination, form,
Can fire create or change, yet are not like
To fire, or aught that can affect the touch,
Or to the sense appreciable be.

To say, moreover, everything is fire,
That naught exists but that through Nature's realm,
Heaps in full measure the absurd and wild,
Makes sense to war with sense, and undermines
All confidence in that by which alone
We know that fire itself exists—belief
Yielding to sense as proving fire, and yet
Refusing it as proof of other things,
Though all as clearly shown—what then is this

But height of folly and of wild delire?
To what shall we appeal, where turn to find
A surer test than sense of true and false?
Why rather all denying leave but fire,
Than fire denying leave all other things?
An equal madness each alternative.

Hence those who Fire sole substance make of things,
Or deem the Air the sole begetting source,
Or those who hold that all's from Water formed,
Or Earth creates and turns through everything,
Needs must we deem to wander from the truth;
And those who feign a double element,
Uniting fire to air, to water earth,
Or seek in all the four the source of things—
Of whom the sage Empedocles is chief,
Born in the Trinacrian isle, whose rugged shore
The Ionian sea wets with its sea-green foam.
Here waste Charybdis is; dread Scylla here
With two-fold terrors frights the mariner;
Here murmuring Ætna, with a noise of flames,
Threatens anew his anger to awake,
And vomit from his jaws the bursting fires,
Bearing anew their gleaming to the skies.
This far-famed isle, by Nature thus endowed,
With much of great, much wonderful and rare;
Though rich in wealth, with richer wealth of men,
Has than this sage no glory more renowned,
More sacred, or more wonderful and dear,

Whose verse divine illustrious truth proclaims,
That scarce he seems sprung from a mortal mould
But he, and those before inferior named,
Though much revealing of a high import—
Who from their hearts' pure shrine responses gave
More holy, more by reason sanctified,
Than what the Pythian from the tripod spoke,
With laurel crowned, at the dark Delphic shrine—
Though great, they greatly fell, with ruin great,
Admitting motion but denying void—
Things soft and rare, but no vacuity—
And further stumbles their philosophy,
That they no limit to division put,
No pause to ruin, since no minima in things—
When well we see there is an extreme point
To things the least to sense perceptible ;
From whence infer that what we can't perceive
Has extreme points—true minima,
That end division and the ruin stop.

And, farther wandering, they betray the truth
In feigning soft the seeds of things, and hence
Destructible ; from whence would follow that
To nothing all might turn, from nothing spring—
Both far from truth, as I before have shown—
Besides, such elements, diverse in their kinds,
And hostile each to each, perish when joined,
Or fly encounter, as at tempests' rise
Water and wind and lightning are dispersed.

Again, if from such four alone were formed
All things, and into them returned, why call
The former, not the latter, seeds, since each
Is formed from each by mutual interchange?
Should you, perchance, suppose that fire with earth,
In coalescing, or with water air,
Change not their natures as they coalesce,
Nothing from them could e'er created rise,
Or living things, or things inanimate ;
Since in all varied combinations each
Would its own nature show, and fire appear
Mingled with earth, water replete with air.
But seeds creative, meet for forming things,
Must with a veiled nature be endowed,
Lest properties discordant should appear,
And overshadow those appropriate
To things from them compounded and create.

Moreo'er, they seek in heaven and its fires
The primal cause—this fire converts to air,
Air genders water, and the water earths ;
Then backward all returns, to water earths,
Water to air, and air to primal fire—
But true primordials no such change can know,
Since something must immutable remain,
Lest all sink sheer in utter nothingness.
For what by change transcends appointed bounds
Entails destruction on what was before,
So true it is, as I before have shown,

The round of change pursuing, we must come
To things that cannot change, or all's destroyed—
Rather then constitute the seeds endowed
With natures such, now to form fire, and now,
By slight additions or subtractions, or
By change of order or of motion, make
The aërial air, water, or earth, since all,
By slightest change can changed be to all.
But manifest, you'll say, all springs from earth,
Is fed, and rises in the light of heaven ;
For did not warmth and genial seasons come,
And sun and showers their kindly influence lend,
Nor fruit, nor shrub, nor animals could grow ;
And did not food our bodies recuperate,
Life would depart from every nerve and limb ;
For doubtless we replenished are and fed,
As is all else alike, from fitting stores.
In truth, since seeds of things in all are mixed,
And Nature's various forms are various fed,
Much it imports how seeds compounded are,
With what affinities and powers endowed,
Since the same elements constitute the air,
The sun, the earth, and animals, and plants,
And other things by unions various—
As in our verse we many letters see,
Common to many words, although the words
Differ in sense and sound—so much is wrought
By ordered changes of constituent parts.
But elements that true primodials are

Much more can many combinations take,
Productive of the varied world of things.

(And now the scheme of Anaxagoras
We sound—Homœomeria called by Greeks—
And though our scantier tongue no name supplies,
Its founding principle we can well unfold :
That bodies all are formed from bodies like ;
Bones from minutest bones, and nerves from nerves ;
Gold from minutest particles of gold,
And earths from earths minute ; water and fire
Formed too from their moleculars ; and all
The rest from unions of the like with like.
But to division they no limits set,
Nor own a void in things—erring in both.
And, further, they their elements conceive
Too weak and fragile when they them endow
With natures like created things, exposed
Like them to fate, and subject to decay.
What could endure—all enmities outbrave—
What 'scape destruction placed in jaws of death ?
Could water, fire, or air, or blood, or bones ?
Neither, I ween, were they founded in truth,
With mortal natures like the things we see
Slip daily out of life, crushed with a breath.
But now, that things can't fall to nothing back,
From nothing grow, established truths attest.
Again, since food by nurturing buildeth up
Our living bodies, bones and flesh must be

Of diverse, hostile elements composed—
Or food must some strange mingled nature have,
Of veins, and nerves, and bones, and gouts of blood ;
Or yet again, if all that springs from earth
Existed in the earth, the earth must be
Composed of matters foreign to itself.
If ashes, smoke, and flame lie hid in wood,
What hostile elements in its rind encamp !

Thin subterfuge is left them to conceal
The weak foundations of their theory ;
They feign all things mingled lie hid in things,
The one alone apparent of which most
Is mingled, dominating thus the rest.
Unsound hypothesis and vain ; for then,
When grain is by the millstone crushed,
We might expect to see the trace of blood,
Or other substance that supports our frame ;
See cropped herbage udder-like distil
Sweet drops of milk, and pulverized earth display
The secret germs of plants, and fruits, and flowers ;
See wood heat fostering show ashes and smoke,
And latent fire deep lurking in its veins.
'Tis manifest that naught like this can be ;
Hence we may know things are not mixed in things,
But common elements in a thousand ways
Are hid and mingled in their varied forms.

But oft you'll say on lofty mountain heights

The neighbor top of trees swayed by the winds
Are creaking rubbed, till by attrition they
Burst into flower of flame ; not that the fire
Dwells in the wood, but rather seeds of heat,
By friction forced to flow, together run,
And bursting barriers fire the leafy tops.
For sure, if latent lay the flames in wood,
Not long could they be hid, but, bursting forth,
Would ravage forests, burning every shrub.

Hence you may see, as we just now have said,
What import 'tis how atoms are conceived,
And what impulses they can give or take,
Since fire by slightest change can spring from wood,
As words "*firs*," "*fire*," by change of letters change

In fine, if you suppose that all things seen
Can only be built up and founded on
Things like themselves, with properties endowed,
The very elements you would thus impair,
And subject make to laughter and to tears.

And now, the truth more clearly spoken, hear !
Nor deem I, not deceived, the theme obscure,
But love of praise, keen, emulative, hath
With its inspiring thyrsus smote my breast,
Instinct with the Muse's love ; with ardent soul,
I traverse fields untrod, and win my way
Through pathless regions of the Muse's realm.

Oh, dear delight to dip in virgin founts!
First comer, thence large draughts to take! oh joy
To pluck new flowers, and weave for them a crown
That never yet hath decked a poet's brow!
In that I treat a lofty theme, devote
From Superstition's chain the soul to free,
O'er things obscure to pour the lucid song,
And deck them with the charms of poesy.
Thus wisely doing as the nurse adroit
Or skilled physician, when they seek to give
To children sick black absynth's bitter draught,
Touch at the edge the circle of the cup
With honeyed sweets, that, flattering the lips,
The thoughtless age may drink the bitter draught;
Thus caught, deceived, uncaptured be by death.
Thus I, in that my theme to many seems,
Who know it not, ungracious and severe,
Well seek, lest they my proffered guidance shun,
With studious zeal my reasoning to enfold
In the sweet accents of the Muse's voice,
And clothing things obscure in garb of song,
With pleasing art to win attentive ears,
To mark my words, till they may clearly see
How formed and shaped the frame of Nature is.

Now, since I've taught how solid seeds of things
Unconquered float triumphant over time,
I now of their infinity must treat:
Whether their sum owns limits—and of Space,

Whether its void, vast womb is finite, or extends
 Through the immense—profound beyond profound.
 Know the Great Whole, then, all unbounded is,
 For that which bounds must be itself a part
 Of the Great Whole which it pretends to bound.
 Where will you find, then, limitary shore?
 It matters not in what far region you
 Set up imagined bounds; the Infinite
 Will still remain, wide stretched your bourne beyond.

Should any say that space is limited,
 Let him, then, standing on the fartherest shore,
 An arrow launch to glide where forced to go.
 Which will you choose? glides it right, or stops,
 Encountering obstacle?—of either, one,
 And either will escape preclude, and force
 Acknowledgment the Whole is infinite.
 For should a something bar its onward course,
 That something sure an extreme part must have,
 And bounds to its extreme; no limit found—
 Or bears it on unchecked? then I the shaft
 Pursue—confessed, no bounds revealed—and thus
 The faculty of further flight forbids
 Escape, since into regions infinite,
 Beyond beyond, thought may pursue the flight,
 And find no stop, no limitary goal,
 Still in the centre wheresoe'er it goes,
 With equal space before it as behind.

The visible world displays things bounding things ;
Air girds the hills, the mountains bound the air,
Land limits sea, the sea encircles land,
But for the Whole there's naught outside to gird.

Again, if Space, whose wide-spread bosom holds
Nature's Great Whole, were hemmed by fixed bounds,
The sum of Matter would long since have sunk
To some dark lowest seat ; nor could things seen
Have risen ere beneath the cope of heaven,
Or heaven itself spread out its arch of stars ;
But Matter, sinking through all time, one mass,
Inert and dead, would have long since become.
But now no pause to elements is given,
Since there's no lowest seat where they may rest ;
But, by unending motion throughout time,
They from all sides, from out the Infinite
Summoned, are quickened for creation's work.
Space then exists unlimited, profound.
No river, gliding infinite through time,
Can the long way accomplish, but as much
Will stretch before as beyond it lies.

Moreover, Nature's self has set the law,
That sum of things should be illimitable ;
Since space bounds body—body limits space,
They alternating infinite make the Whole.
Were one alone stretched to infinitude,

'Twould its coëternal brother element
Engulf and swallow in its amplitude ;
Nor could great Nature's works, nor sea nor earth,
The glittering temples of the heavens on high,
Nor gods nor men, an instant term endure.
The stores of matter, from assemblage torn,
Dissolved would be in the vast womb of space—
Dissolved and lost, or rather, wide dispersed,
Could ne'er have joined to form created things.

Sure not by design, or a prescient cause,
Atoms took order and their movements planned ;
But wrought to many a change, by many a blow
Tormented through infinity of time,
All possible assemblages essayed,
At length they fell on those that could endure ;
And thus creation's sum, our universe, arose ;
Fit movements once begun, and well maintained
Through many a cycle of revolving years,
Made rivers large with their abounding flow
Plenish the sea ; Earth, fostered by the sun,
Renew her fruits nutritious, and supply
Food for the tribes that hang upon her breast,
And fed by Ether live the gliding fires—
Which ne'er could be, were no provided store
Matter exhaustless to renew the lost—
Deprived of food, as living bodies waste,
So all would be dissolved, should matter once

Diverted, fail to furnish due supply.
Nor could external impacts long preserve
Compacted things; thick falling they may lie
Upon the atoms, and delay their flight
Till others come to keep the complement;
But intermitting they must time afford
For elements to 'scape material bonds,
Leaving them free to float in empty space,
Whence more must come, vacated space to fill.
Hence, to maintain unending impulses,
Exacts a store of atoms infinite.

And here, my Memmius, guard against belief
Of what some say, "that to the centre tend
All things, and thus the world can stand
Without external impulses and shocks;
That what's below can't part from what's above,
Since all struggle and bear to some fixed central
point."

But how believe that anything can stand,
Self-balanced on itself—that weight below
Strives upward, tending with resilient power,
And thus finds rest back pressing on the earth;
As the smooth lake shows an inverted world
Of woods and hills based on the world above—
By the same fancy living hosts below
Frequent inverted lands, and can no more
Fall thence, down borne to subterranean vault,

Than what we see firm planted on the earth
Can rise spontaneous to the fields of air ;
That they with us the world divide, and when
They see the sun, the stars of night we see ;
That sky and seasons alternating come
To them and us, and equal days and nights
Above, below, in due succession reign.

All these and like vain fancies fitly flow
From a wrong principle perversely held.
To Infinite there can no centre be,
Or if a centre, say why rather there
Should matter tend to and take up its rest,
Than to some other region far remote ?
Since empty space must yield an equal way
To moving things through centre as through all ;
Nor is there place where bodies coming can,
Of weight divested, station take in space ;
Nor can the void give stopping place to aught,
But must by nature yield alike to all ;
How, struck with longing for the centre, then,
Could frame of things in harmony be held ?

Besides, they feign not everything thus to
The centre tends—fluids and earths alone—
The ocean billows and the streams from hills
Down rushing, and whate'er is formed terrene ;
But hold opposing this that the thin air

And heat far-radiant from the centre flows ;
And thus the ether glitters with its fires.
The sun, wide feeding through cerulean plains,
Its lustrous nature draws—as living things
Forsooth from earth are fed—since light and heat
From centre streaming there collect their rays ;
As trees would not grow leafy at their tops,
Did not from earth earth give them nurture due.

Thus they in devious error wide diversely stray,
And frame throughout repugnant theories,
Founded on false assumptions rashly held—
Now, since I've taught that Space is infinite,
On all sides spread in its immensity,
Needs also then that Matter infinite
Must be supplied, lest, like to winged flames,
The pillars of the world should take their flight
Dissolved through void, and all the universe
Quick follow them in equal ruin whelmed—
Lest pathway spread for thunder's rattling car
Should crumble up, and earth beneath our feet
Sudden wide gape, all things dissolved, till now
The mingled ruins of the earth and sky
Together sink, in the waste void engulfed—
That in an instant nothing would be left
But space and atoms in chaotic mass.
Let one part fail all will to ruin rush ;
That failing part will be the jaws of death.

These truths received, light labor will remain,
For truth on truth a mutual light will shed ;
No longer shall thick night your path invest ;
Truth holds a lantern for the search of Truth,
And you shall bow at Nature's inner shrine.

END OF BOOK I.

BOOK II.

OF ATOMS.

Opening.—Praise of Philosophy.—How Atoms produce All Things.—
Declination of Atoms.—Freedom of the Will.—Atoms in ceaseless
Motion.—The Universe at Rest.—Qualities of Things arise from
Form of Atoms.—Forms of Atoms limited.—Number of each Form
Infinite.—Elements wage Eternal War.—Production and Destruc-
tion alternately prevail.—Personification of the Great Mother.—
Nature of the Gods.—Atoms void of all Sensible Qualities.—Sen-
sation springs from the Insensate.—How Life is developed.—All
springs from a Celestial Source.—Space Infinite.—Innumerable
Worlds.—Creation.—Growth of Things and Decay.—The Earth
worn out.—Close.

BOOK II.

'TIS sweet from land, when seas are raging wild,
To see another struggling on the deep ;
Not that 'tis sweet his torment to behold,
But sweet to look on ills, ourselves secure ;
'Tis sweet to see the opposing fronts of war
Arrayed in fields, their dangers all unshared ;
But sweeter far to mount to learning's height,
Temples serene of science wisdom reared—
The palaces of thought—safe occupants,
Thence to look down on mortals, wandering wide,
Seeking with devious steps the path of life ;
See strife of intellect, the pride of birth,
With direful labor struggling day and night
To climb to height of power and mastery gain.

Oh, miserable thoughts of men ! oh, blinded souls !
In what thick darkness, in what perils dire,
You drag the chain of life whate'er it be !
And see you not how little Nature craves
For our corporeal wants ? no more than this :
The body free from pain, soul free to enjoy
A sense of bliss without a fear or care.

By Nature's bounteous gift, whate'er affords
Relief from pain spreads pleasure in its stead,
Nor greater pleasure does she e'er require.
Though in your halls no golden statues bear
In their right hands rare gilded lamps aloft,
To shed on nightly feasts light like the day;—
Though through your house no burnished silver shines,
No golden lustre gleams, no stringed lute,
No harp through arched and gilded halls resound;
Yet not the less in social groups reclined
Upon the verdant grass, near whispering streams,
Joys all unbought your senses overspread,
When summer tide prevails, or when the spring
The Earth enamels with resplendent flowers!
Nor will the raging fever leave the limbs
The sooner lying on embroidered couch
Than low reclined upon pallet rude!

Wherefore, since wealth avails the body naught,
Nor birth, nor glories of the kingly sway,
They to the soul still less advantage bring;
If not, forsooth, by legions in the field,
Your banners bearing, ranged in pomp of war—
If not by fleets, proud messengers wide spread,
The dread inspiring Superstition's train
And ghastly fears of death dispelled can be—
If 'tis not thus your soul assoiled can be,
And bosom purged of the perilous stuff;
If e'en the thought a mockery seems—and sooth,

The fears of men, and their corroding cares,
Regard not pomp of war, nor clash of arms;
But rudely king and conquerors assail,
Small reverence showing for the gleam of gold,
Or splendors of the purple robe—how doubt
Reason alone has this prerogative,
Since now life's but a struggle in the dark!
For e'en as children tremble in the dark,
And all things fear, we tremble in light,
And blindly fear things no more worthy fear
Than what affrightens children in the dark,
Filling the future with vain phantoms dread,
These terrors, and this blindness of the soul,
Not by the sun's bright rays, arrows of day,
Can be dispelled; rather by reasoning sound,
Revealing Nature's aspect and her laws.

And now, to tell how moving, primal seeds
Builds up all things, and them built up, dissolves;
How innate motion gives to them the power
To permeate the void and float in space,—
My verse proceeds; lend thou attentive ears!
For Matter is not bound by fixed links;
We see all things decay, and, as it were,
Float down the stream of time; to all, in turn,
Old age creeps on with visible advance;
Decay of some leaves others free to grow,
And thus the sum of things rests unimpaired;
While these wax old, those flourish in their prime,

But rest not there, but glide adown the tide.
 Thus the Great Whole is ceaselessly renewed,
 For mortals live by mutual interchange.—
 Some wax, some wane; thus generations change,
 And, like to runners in the Grecian game,
 Bear for brief time, and then to others pass,
 (The lamp of life their hands are forced to yield.

But if you think that elements of things,
 Stopping, can cease new motions to produce;
 Widely you would from truth of reason stray.
 Since all float in a void, they all must move
 By impact, or by weight; thus wrought upon,
 Encountering, they sudden start athwart.
 Nor strange such resilience, since solid they,
 And nothing rearward lets their impetus.—
 The better to conceive how matter's tossed,—
 Know the Great Whole no lowest seat can know
 No bounds admit, since equal space extends,
 Vast, limitless, above, below, around.
 No wonder, then, no place of rest is found
 To primal bodies through the vast profound,
 And, finding none, they cease not ceaseless rounds.
 Part, forced together, wide asunder leap;
 From closer blow part, grappling with their kind,
 In close affinities unite and form
 Bodies of various figure—varied forms diverse.
 Thus the foundations of the rocks were laid,
 The unyielding strength of iron, and the like;

While some resilient, parting more and more,
Diffuse form, light, and the ethereal air.
And some there are wide wandering in space,
That all affinities reject, nor can unite
With any body in a common bond—
That thus they comport as I have described.
Fit image see, where'er a beam of light,
Through chink or crevice, streams in darkened room :
A thousand bodies, in a thousand ways,
Incessant conflict wage, sole or in groups,
Nor cease in unions and disunions vexed.
Thus smallest things example give of great,
And from their conflict you may well conceive
What elemental strife torments the Void.
Further befits you, note that the wild play
And ceaseless dance of motes in beam of light
Imply veiled motions of the elements.
You see them dashed diverse by secret blows,
Down, up, around, athwart ; know all is due
To secret impulses that atoms give.
Prime elements inherent motions have ;
Bodies minute, as nearest elements,
Motions receive from impulses invisible ;
From them receive, and give to higher forms.
Thus mounts it up from atoms, and becomes
Apparent unto sense, although the shock,
First origin, is in minuteness veiled.

And now, with what mobility endowed,

These primal elements, thou may'st learn from this :
Soon as Aurora streaks the east with light,
Innumerable birds in pathless woods
Enrich the ambient air with liquid notes.
How suddenly the sun, arising then,
With dazzling floods invests all things with light !
And yet the effluence and light serene
The sun dispenses flow not in a void,
But meet aërial waves that check their course.
For light and heat not isolated are,
But massed and intervolved, adhering close,
Clogged and delayed, drag slowly their way through.
But primal atoms, when they flow in void,
Encountering nothing, single in their parts,
Borne by one impulse to one certain goal,
Must far exceed the light's rapidity,
And than her rays far wider space transcend ;
For infinite atoms, in a boundless void,
By endless motions builds the frame of things.

But deem not thou, for this, Intelligence
Can wait on these primordial principles,
And follow up to see how each comports—
As some suppose, of Matter ignorant,
And of her powers maintain Nature could not,
Without the aid of gods, the seasons change,
Reclothe the Earth with verdure, and reveal
Order so tempered to the wants of men ;
As pleasure, divine attendant, goes before,

And them by natural enticements leads,
And joys of love, to propagate their kind,
And suffers not their races to decay;
Wherefore they feign the gods framed all for man—
Erring and wide of truth—though hid from me
What elements in their essences may be;
Yet this I dare affirm, from wandering heavens,
And the mad course of human things below,
Nature was not divinely formed for man,
So full of imperfections and defects;
Which after argument shall more clear unfold.

Now, as I think this is fit place, to show
Nothing by innate power can upward rise—
And let not flames that up exulting spring,
Nor plants that rise 'gainst gravitative power,
Your mind deceive, nor lead you to believe
When flames leap to the roof, the rafters lick,
They comport this without impelling power.
For see you not, when laboring hard we strive
Vast beams of wood to bury in the deep,
The more we strive the more rejecting wave
Sends leaping upward what we'd force below?
But not all this, I ween, should make us doubt
That in a void, by weight, all bears below,
Tending to fall; thus flames alike would fall,
If not borne upward by embracing air.
For see you not how with a trail of light
The gliding meteors streak the vault of heaven,

Go as impelled where'er pathway is found?
Unseated fall the stars; the sun in heaven
Darts heat on all, and sows the fields with light;
Lightnings fly thwart the lurid clouds abrupt;
The thunder-bolt falls frequent to the earth.

And here this also we would have you know;
When atoms are down borne through the sheer void,
In space uncertain, at times undefined,
They swerve a little from an equal poise;
So little only as you'd call a change
Of inclination; for, if not, did all
Like drops of rain fall in right lines, there'd be
No impulses, no elemental shocks,
No generative motions or energetic acts;
Nor thus could Nature anything create
Think not the heavy would o'ertake the light,
By falling sheer in swifter impulse borne,
And thus creative shocks by impact spring.
Bodies that fall through water or through air
With varied motions fall, since fluid fails
To check alike the heavy and the light,
But to the heaviest quickest yields a way;
While in a void, where no resistance's found,
All equal move, though of unequal weight;
Nor can the heavy, falling on the light,
Collisions cause self-acting to produce
Generic motions by which Nature acts;
Wherefore, again, atoms from line direct

Must swerve ; but yet the least conceivable ;
 Lest we be found to feign motions oblique,
 'Gainst truth ; for bodies falling, it is plain,
 Fall not oblique ; but how affirm that they
 No declination have insensible to sight ?

Again, if all motion in a chain were bound,
 If new from old in fixed order flowed,
 Cause linked to cause in an eternal round ;
 If atoms no concealed clinamen had
 Cause to create, and break the bond of fate,
 How could free will in animals exist ?
 How could I say the power be snatched from fate,
 That leads all now where pleasures prompt to go ?
 For motions are not bound in time and place ;
 The mind prevails. Will first beginning makes
 Of motion, that from thence wells through the frame.
 For see you not when, barriers loosed, forth bursts
 The impulsive courser, eager for the race,
 How lingers he behind his quick desire ?
 All forces of the frame must first conspire,
 Each nerve be strung to mate the eager mind ;
 Since seat of motion is within the breast,
 Where Will resides, whose promptings limbs obey.
 Far different 'tis when we are forced to move
 By impulse from without against our will ;
 Though hurried headlong still the will resists,
 And, acting on our members, checks our course.
 For see you not, when some exterior force

Acts on the body and compels to move,
 Still, in the breast there's something that resists;
 That umpire sits, and rules our limbs, and makes
 Them now advance, and now reined in, retire?
 Hence, in first principles we must confess
 There's something more than impulses and weight—
 As cause of motion, whence the power of will
 Proceeds in us, since nought from nothing comes.—
 Weight may resist to impulses extern;
 But that the mind's volition is controlled
 By no necessity innate, that binds
 To suffer and to bear whate'er imposed,
 Is to clinamen due, insensible, undefined.

The store of elements material,
 Admits no diminution, no increase,
 Was never more condensed, nor more diffused.—
 All that harmonious moving now exists
 Existed in the past, and will in time
 To come. All that in birth emerges is
 Created new, but with conditions old;
 They rise and grow, and flourish for their time,
 As far as Nature's law to each allows,
 And naught exists to change the sum of things;
 From the Great Whole no place exists apart,
 Aught to receive new influence whence can come
 New powers invade the universal whole.

Nor wond'rous deem it that, though atoms move,

The sum of things in fixed quiet dwells,
And knows no motion but of separate parts.
Since nature of first elements is hid,
Their motions too must be invisible,
In sheer minuteness veiled; as motion oft
Of visible things by distance is concealed—
The fleecy flock, grazing on distant hills,
Incessant move, and intermingling glide
Where grass invites gemmed with the recent dew;
The full-fed lambs in playful gambols sport;
Yet all from distance viewed confused appears,
Like a white cloud upon the verdant hill.
So, when vast legions in the guise of war
Fill all the plain, and horsemen prick about,
At signal's sound in sudden onset move—
A brightness glances to the fields of air,
The region round gleams with the brazen arms,
Earth groans beneath the sound of trampling feet,
Loud clamor strikes the hills, the stricken hills
The voices echo to the stars of heaven;
Yet all the turmoil, viewed from distant height,
Seems but a brightness sleeping on the plain.

Now learn how diverse primal atoms are,
How varied they in figure and in form.
Not but some few are like, but not all like;—
Nor wondrous 'tis they various are, so great
Their multitude that sum nor limit knows.
Of all the individuals that compose

The human race, the sea's mute scaly brood,
The forest tribes, the varied-plumed birds
That haunt fair sunny banks, fountains, and groves,
Or fitful fan the air in pathless woods,
Take any one of any kind you will,
Though like in kind they singly differ all.
Not else could offspring their own mothers know ;
Their mothers, them as yet we see they know,
Not less than men know their own fellow men.
As oft before the decorated shrines
The victim calf young immolated falls,
Forth breathing from its breast the warm life-blood,—
The mother roams the lawns bereaved the while ;
Well known what cloven foot-prints mark the mead,
Scanning with eager looks each bush and brake,
Her offspring lost to spy ; oft standing still,
Fills all the leafy grove with loud complaints,
And then, transfixed with longing, seeks the empty
stall ;
Not tender willows nor grass fed with dew,
Nor rivulets gliding level with their banks,
Her soul can now delight, her care assuage ;
No other firstling of the flock can please,
Through the glad fields, her anxious thought divert,
The one, her own, her bleeding heart requires.

The tender kid with tremulous voice its dam,
The frolic lamb its fleecy mother knows
Amid the bleating flock ; by instinct led,

Each to its own milk-giving fountain runs.
And all corn-growing plants, though like in kind,
Yet endless change diversifies their forms.
How varied are the shells that blushing paint
The ground where feeds the sea with gentle waves
The thirsty sands upon the curved shore!
For a like reason elements of things,
Since formed by Nature, not by model made,
Must float about with forms dissimilar.

Resolve you may from this why lightning's fires
More penetrating are than fires of earth,
Since formed of subtler parts, fitted to pass
Minuter pores than fires of earth can pass.
Light traverses the thin, transparent horn
That yields no passage to the denser air ;
The lively wine through filters freely flows,
Where lingers long the grossly-formed oil.
Why this, but that of larger atoms formed ;
Or hooked and intervolved that will not part
To traverse singly such pores minute.

And further add, of differing elements ;
The luscious honey and the grateful milk
Soothe and delight the sense, while, all unlike,
The nauseous wormwood and harsh centaury
Torture the organ with their savor rude.
Hence thou may'st learn that all delighting sense
Are formed of round and polished elements,

While all the bitter are of rough and sharp,
And knit together with parts hooked and locked,
That rend the organ in the passage rude.
Thus all that flatter or offend the sense
Are differenced in their elemental forms ;
Unless you think the sound of grating saw
Of the same airs composed as notes that flow
Mellifluous from the lute divinely touched ;
Or that like atoms to the nostrils come
From the dead carcass festering in the gale,
As when high altars incense exhale,
Or breathes Cilician saffron from theatric scenes ;
Or colors deem of the same rays composed,
On which the eye feeds and delights to dwell,
And all the dismal and abhorred sights
Which pierce the organ and force tears to flow.
Hence we infer all that delights the sense
Is not without a certain smoothness formed
Of elemental parts ; all that offends
Some roughness of its atoms must conceal ;
And some there are formed neither smooth nor sharp,
But with projecting angles fitted more
To rouse, but not offend the sense—such are
The insipid fecula and lees of wine.

How different is fire from piercing frost !
Yet both composed of atoms toothed and sharp,
As proved by touch. Touch, O ye sacred powers—
Touch is the organ whence all knowledge flows ;

Touch is the body's sense of things extern,
And of sensations that deep spring within ;
Whether delightsome, as in genial act,
Or rude collision torturing from without ;
How different, then, must forms of atoms be
Which such sensation varied can produce !

Again, the dense, rugged, and hard are formed
Of atoms hooked like branches deep entwined ;
As chief is seen in adamantine rocks,
Or the tough strength of iron or of brass,
That grates beneath the hinges of our doors.
Fluids, again, of bodies round and smooth
Must be composed ; not held englobed, but free
Headlong to glide down least declivity ;
While those that in an instant are dispersed,
And flee away, as smoke, or clouds, or flame,
If not of round and smooth, are yet unbound
And uninvolved, since pores they penetrate,—
Formed then of sharp, and not of atoms hooked.
That what is fluid may yet bitter be,
As is the briny sea, need not surprise ;
For round and smooth may well with rough be mixed,
And not retained with o'er tenacious hooks.
And thus the atoms that embrine the sea
May from its liquid elements be strained,
The fluent waters, percolating earth,
Rise sweet and freshened in the sandy trench,
Its acrid salts involved and left behind.

This truth established, I with it must join
 A kindred truth that draws its proof from this,—
 That seeds can vary but in finite forms ;
 If not, some would in size be infinite,
 For seeds can bear but little change of shape.
 Conceive them, if you will, of three least parts,
 Or more ; vary at will order of parts ;
 The bottom make the top, the right the left,
 You soon exhaust the forms within your power
 To make. What further mode of varying ?
 Part add to part ; to gain unnumbered forms
 You still must to your adding add, and make
 The infinitely small immensely great,
 Which, as I've shown, it is not, nor can be.

Could atoms boast infinity of forms,
 Naught could be fixed, no measure things could
 know.

The garments rich of oriental woof,
 The glowing purple of Thessalian dye,
 The golden brood of Juno's favorite bird,
 With Iris eyes in laughing beauty steeped,
 Would be despised, surpassed by newer tints.
 The scent of myrrh, the honey's luscious gust,
 The swan's melodious note, the strings divine
 Of Phœbus' lute, breathing celestial airs,
 Would sink in silence, and would be disdained
 For newer measures and diviner song,
 That would surpassing in succession rise

To captivate the sense, the soul enthrall ;—
 Or, backward borne, worse would succeed to worse,
 The eyes and ears to torture with offence
 Beyond endurance as beyond conceit.
 Since not in nature thus, but all is held
 In fixed limits and without excess
 Of evil or of good, needs then confess
 That matter differs but in finite forms.
 From frost to fire, from fire to hoary frost,
 A path is traversed and remeasured back ;
 For cold and heat on extreme boundaries lie,
 While moderate warmth between completes the scale.
 For things are differenced by finite degrees,
 Marked on each side's extreme by points—by flames
 Molested here, and there by nipping frost.

This proved, join with it kindred truth—
 Though limited the forms of atoms yet,
 The atoms of each form are limitless,
 Else limited were the universal Whole,
 Which 'tis not, as I've proved, and cannot be ;—
 Since, as my verse has shown, 'tis to the sum
 Of atoms infinite, and successive shocks
 Unintermitted joined—cause linked to cause
 Through time—great Nature owes her maintenance,
 And long procession of the course of things.—
 Though in the regions of the earth we hold
 Some animals be rarely seen, deem not
 Prolific Nature in them less fecund.

In other lands, in regions far remote,
 Their numbers are replete though wanting here.
 Fit instance gives of quadrupeds the chief,
 The elephant huge that wields the lithe probos,
 Best substitute for hands, though here rare seen,
 In the far Indian clime so thick they swarm,
 Their serried ranks an ivory rampart form
 Impenetrable, round else defenceless walls.

But grant that one sole animal exists
 Whose like is nowhere found throughout the world,—
 Without supply of matter infinite,
 How it created, or created reared?
 Assume birthgiving seeds of some one thing
 Float in the universe in numbers limited,
 Where, by what power, or how could they unite,
 In such a sea of foreign matter lost?
 They, as I ween, without all power to join
 In forming things, scattered wide cast would lie,
 Like fragments floating on the vasty deep
 Of masts and yards, rudders and banks of oars,
 From ships by storms dispersed, that, swayed by
 winds,
 Borne on by waves, bear to all shores afar
 The warning signs for mortals not to trust
 The faithless sea, when, decked her mirrored face
 In calm, she beckons with fallacious smile.
 For should you finite make constituent seeds,
 The raging tide of chaos would disperse

Them wide throughout the infinite womb of space ;
That ne'er assembled could they join to form
Created things, nor in their course delay
To feed them, formed—but present Nature proves
That things are formed and grow ; hence, of each
kind
The seeds are infinite that can all supply.

Neither destructive powers for aye prevail
To bury all things in eternal sleep,
Nor can creative triumphing, unchecked,
Preserve through endless time created things ;
But, deadly opposites, to make or mar,
They wage eternal war with balanc'd power.
Here life prevails ; there death ; and intermixed
With lamentation is the early cry
Of new-born infant ushered to the light ;
No night succeeds the day—no morn the night,
That hears not sickly plaint of infant, mixed
With wail of death, and black funereal cries

Here careful note and deep engraven hold ;
That naught is built of single elements,
But all of varied seeds ; and all the more
Things differ in their properties and powers,
More varied must their component atoms be
And chief, the Earth has elemental stores
Whence springs, their coolness rolling, feed the sea
With ceaseless flow ; and seeds whence fires are fed,

That parch her desert plains, adust and dry,
Or frequent flame from out her rugged breast,
As raging Ætna heaves with far-famed fires,—
And primal seeds she has, with genial power
To lift the foodful heads of corn for man,
The waving foliage, and pastures glad,
Food yielding to all beasts in woods and wilds ;
Hence she is called great Mother of the gods—
Mother of men, and all inferior tribes.
The Grecian poets feigned her in a car,
Seated aloft, by yoked lions drawn—
Thus teaching that the earth is hung in space—
Foundationless ; and at her chariot bars
They yoked savage beasts, fitted to show
That naught so savage, wild, and rude of soul
As not to soften with a mother's care.
They girt her head aloft with mural crown,
Since cities' crowning heights are fed by her,—
And in this guise the Deity arrayed
Throughout the nations moves inspiring awe.
The varied peoples after antique rites
Call her the Idean Mother. Phrygian priests,
Attend ! since in the Phrygian borders first
Corn-harvests sprung, thence overspread the earth.
For priests they give her eunuchs, feigned to show
That those who stain a mother's sanctity,
Or to their parents e'er ungrateful prove,
Are to be deemed accursed ; no progeny
Of theirs, baleful, shall e'er affront the light.

Thus moving, they loud drums and cymbals clash,
While shrill-voiced pipes rouse and excite
The mind with Phrygian measures; arms they bear;
And torturing instruments to fright the souls
Of the ignoble, and the impious herd
Whom gratitude cannot reach; that, roused by fear,
They may the great Divinity confess.

While thus she moves, through mighty cities borne,
Diffusing blessings silently on men,
They strew her way with gifts, silver and gold;
Upon her path rain roses, and with flowers
The sacred Mother shade, and her attendant choirs.—
This band, Curetes called by Greeks, as loud
They clank their chains, distained with blood, and
round

The Goddess dance, shaking her threatening crest,
Recall the Dictean Curetes, who drowned
The infant cries of Jupiter in Crete,
As erst round him, new-born, the agile choir
With the loud plectrum beat their brazen arms,
Lest Saturn seizing should devour the boy,
And pierce his mother with undying grief.
These armed bands attend to shadow forth
The Goddess's command, that men should still
With arms and valor keep their native land,
To parents be an ornament and guard.—
Though well-devised and fit, these antique rites,
And high their import, yet they wander far
From all reality and truth of things.

Natures divine, by necessary laws,
Profoundest peace through endless time enjoy,
Far, far removed from man, and man's concerns—
Free from all pain—from every danger free,
Rejoicing in their self-contained wealth,
Naught needing e'er from us, but are alike
Regardless of our virtues or our crimes.
But not the less for this, if any choose
To give the name of Neptune to the sea,
Ceres to corn, and Bacchus to the grape,
Whose purple juice appropriate named is wine ;
So let them Great Cybele call the Earth,
Mother of gods, if they in fabling thus
Stain not their souls with Superstition dire.

The Earth is inert and devoid of sense,
But in her bosom lie the seeds of things
Diverse, she brings to light innumerable.—
The fleecy flock, the warlike steed, the herd,
Cropping one field, under one scope of sky,
Their thirst assuaging at one fountain's flow,
Not less diversely grow, and each retains
The nature of its kind, from sire to son.
So great diversity there is in food
Of elements ; so great in flow of streams.

Though bones, and nerves, and viscera unite
To form an animal of what kind you will,
They differ, formed of differing elements.

Again, all things that set on fire are burnt,
If nothing else, at least must matter store,
Whence they can light, and heat, and sparks emit,
And glowing embers bear, and cinders wide.
Surveying thus all things by thought, you'll find
That varied germs and seeds lie hid in things ;
For many you may see at once endowed
With color, taste, and smell ; as these diverse
They needs must spring from differing formed seeds.
Now taste can penetrate where colors fail,
And odors in their way insinuant wind,
And flavors reach the sense ; that you may know
That forms dissimilar coalesce in one,
And things are formed of differing elements.—
As in our verse you many letters see,
Common to many words ; yet words and verse
As wholes dissimilar—as having much
In common, but not all alike in all ;
Thus common atoms may exist in things,
The compound whole be yet dissimilar.
Well may we then affirm diversely built,
Of common elements, the tribes of men,
All living animals, and rejoicing shrubs.

But not for this may we suppose that all,
Can in all modes be joined with all, for thus
Monsters were formed ; a race half man, half brute,
On whose huge trunks branches would grow like trees.
The type of tribes terrestrial appear

Ill sorted in the seas; Nature be seen
Feeding through the all-sustaining earth chimeras dire,
Forth breathing baleful flames from horrid throat.
We know full well that none of these can be,
Since all from certain seeds, by fixed laws,
Created spring, and propagate their kind—
For all is done by necessary laws;
Each animal from food assimilates
A part adapt, and in its ducts receives,
That to the body joined fit motions give;
While what is alien Nature prompt ejects.
Much silent flees unseen through secret pores,
Expelled by shocks, that can't assimilate,
Nor move harmonious in the vital play
Of organs, nor bear part in acts of life.
Nor deem for this that living things alone
Are subject to such law; the same rules all;
Since all created things differ throughout,
Wide differing atoms they must needs contain.
Not but that much in common may be found in all,
But all in course do not resemble all;
For as their seeds all differ, differ things
In forms, connections, weights, affinities,
Which thus divide not animals alone,
But land from sea, and the wide heavens from earth.

Now a new truth receive, by labor won—
By grateful labor, since to you redounds
The fruitage of our toil. Think not things white

From atoms white proceed, nor black from black,
Nor that the varied colors that invest
The face of things, in any way proceed
From color of their seeds; since atoms are
Devoid of color, utter and entire.
And should you think no effort of the mind
Can such conception reach, you wander wide;
Since those born blind, who never saw the light,
Know things by touch; and so the mind can reach
Knowledge of things unstained with any hue,—
And what we handle in the shades of night
We don't perceive tinged with distinctive dyes.
Know, then, there 're things that colors cannot stain,
Since every color changes into all,
While primal elements can know no change;
Something immutable must perforce remain,
Lest all sink sheer in utter nothingness.
For what can change or pass appointed bounds
Brings quick destruction on what was before.
Guard, then, to taint with color seeds of things,
Lest elements thus made mutable, you sap
The sure foundation of the frame of things.

Moreo'er, if no color be to seeds assigned,
But they're endowed with forms that can beget
All colors and their change, much it imports
In what positions they can be combined,
And what impulses they can give or take—
Since thence you can explain why what was dark

Should now with a resplendent whiteness gleam ;
As the cerulean sea, roughened by storms,
Turns its dark azure waves to snowy foam ;
Since atoms changing combinations, ranks,
Can make the dark with lustrous brightness shine.
But were the waves themselves cerulean,
The sea could never wear its dazzling robe,
For agitation powerless were to make
The black to a marmoreal whiteness turn.
But if the sea unsullied brightness owes
To mingling of diversely tintured seeds,
As diverse figures come from forms diverse ;
Then should the sea its varied colors show—
As in a square we varied shapes can see—
Since naught prevents figures diverse to join,
And yet the whole exterior form be square.
But varied colors in a thing forbid
A brightness uniform of the whole to show.
Thus fails the cause that prompts us to endow
With color seeds of things, since white does not
From atoms white proceed, nor black from black.
And varied colors can more easy spring
From atoms colorless, than can the white
Rise by conversion from opponent black.

Again, without light, no color can exist ;
While atoms are not subject to its rays,
Hence needs with colors must unclothed be.

What color is there in the dark, that in
The light can change, and take all varied hues,
As struck with rays direct or rays oblique?
As in the sun the pigeon's changeful plume,
That with an emerald collar girds the neck,
Now glows with purple, now with rubies glows,
Or with its coral red mingles the emerald.
The peacock's outspread pomp, bathed in the light,
At every turn reflects the shifting hues.
What thus the brushing of the wings of light
Can cause, without the light uncaused must be—
The pupilled eye, when it perceives the white,
Impressions different takes than from the black ;
Nor matters it what colors clothe things touched,
But rather what their forms, that you may know
No need for color is to atoms, since
The varied sense of touch from forms can spring.

And since no color is to shapes assigned,
But any shape can any color take ;
Why are not things formed from them thus endowed,
And every kind rejoice in every hue ?
Why drops not then the crow, sometimes in flight,
A feather white ? Why not one black the swan ?

The more minutely things divided are
The more their colors fade. The burnished gold
To dust divided, or the purple robe
Torn thread from thread, lose their resplendent hues,

Revealing thus that particles exhale
All colors, and breathe out their lustrous dyes
Ere they fall back from things to primal seeds.

As not all bodies sound or smell emit,
Hence not to all you sound or smell ascribe ;
And, as some bodies are invisible,
Infer that they devoid of color are ;
Nor less sagacious mind can this infer,
Than that there 're some devoid of sound and smell.

Nor void alone of color atoms are ;
They're void alike of moisture, heat, or cold,
Savor, or sound, or smell—to all alike
Sterile and dead, and free from their attainment.
Thus when the odorous ointment we would form
Of myrrh or marjoram, exhaling sweets,
We choose the inodorous oil from olive drawn
To bear the airy essence of the flower,
Lest mingled odors taint the rich perfume.
So primal elements in forming things
Can bring with them nor sound, savor, nor smell,
Since from themselves they nothing can emit ;
But things created, be they what they may,
A lapsing and corrupting nature show,
Soft, pliant, brittle, or deep-mined with holes,
Which far from elements must be disjoined,
If we to things would give eternal base,

Potent to triumph in security,
Lest all return to utter nothingness.

Whate'er sensation has, we must confess
From the insensate springs—facts manifest
Confute not, but confirm and force belief,
That all the living from the lifeless springs;—
For see live worms creep from the putrid clod,
When the warm earth is wet with timely showers—
Behold all things move in a ceaseless round—
Moisture to herbs, the herb to the fed flock,
The flock to man, in due succession come,
And man himself, sometimes, from quivering limbs,
Sad sustenance yields to swell the savage strength
Of ravening beasts or strong-winged birds of prey.
Thus Nature food of every kind converts
To living bodies and engenders sense,—
As the dead stubble and dry, lifeless thorns
Unfold in flames, and all converts to fire.
Hence you may see of what great moment 'tis
How atoms are combined, how, mingled, they
Can varied motions give, or can receive.

What then so moves your mind, and draws it forth
In varied utterance, that you deny
Sensation can from the insensate spring—
Forsooth because stones, wood, and earth cannot,
However mixed, alone give vital sense—
Some bond harmonious it behooves must come

Before the lifeless can be clothed with life.
Nor say I life indifferent springs from all,
Such worth it is how atoms are combined
Mysterious, with motion ranks affinities ;
And though these be unseen in wood or stones,
Yet they, fermenting with warm, fertile showers,
Engender creeping things. Why this, but that
Their ancient ranks, struck by some newer cause,
Leap into life, and animals produce.

Then they who say perversely that the sense
Can only come from atoms sensible,
Needs must suppose them pliable and soft ;
For life is to a fragile vessel joined
Of nerves and veins and viscera composed,
That show a nature lapsing and infirm.
But grant that atoms sensible and soft
Can yet eternal be. Such atoms, then,
Themselves are animals, or else as parts
Must animated be ; but parts can't feel ;
The limbs dissevered emptied are of sense ;
For all must in one whole compacted be,
And knit together in a living frame,
Ere they can vibrate in the thrill of sense,
Or bear their part in pleasure or in pain.
Remains that they resemble animals—
They then must feel as they,—that all in them
May work in concert with the vital sense.
How can they, then, primordials be called ?

How shun the paths of death, since living they,
And life itself is but a part of death?
But grant they could,—their union would but form
A living medley—confused throes of life,
Vain, unproductive—as birds, beasts, and men,
However mixed, yet nothing can produce.
Or if, perchance, they lose their former sense,
And take new life, why thus the boon ascribe,
And then retract, ascribing without need?
Return we then to our first pregnant proof:
When from the egg we see the callow bird
Emerge to life, its frail envelope chipped;
When see the clod, inert before, wet with
Warm showers ferment with life, how then deny
Sensation can from the insensate spring?

Should any say that sense from the devoid
Of sense by change can come, as in the womb
The embryo takes life before the birth—
Enough to know, without a previous bond,
Harmonious acting of the primal seeds,
No birth can be nor any change can come,
To give before birth to pregnant germs their life.
Far, far too wide-dispersed must they be
In air and fire and earth for them to join,
And, coalescing in appropriate bond,
Light up the vital motions that can give
The all-discerning powers that wake in animals.

Then, when some greater shock a life assails
Than Nature can support, sudden all sense
Of mind and body is confused and stunned,
The ordering of elements dissolved,
Their bond of union snapped, the silver cord
Is loosed, the vital tide turned back, and life
With all its elements dispersed. But what
Can blows do more than shatter and dissolve
What once was joined? O'er lighter blows thus oft
The vital powers can triumph and assuage
The tumult in the frame, repel black death
Ere it subdues, to former flow recall
The ebbing tide, relight the senses lost.
How else, collected, could the soul return
From gates of death to life, and not go on,
As tending, pass beyond beyond returnless bourne?

As there is pain when organized matter's racked
By any force within the living frame,
It quakes and writhes in inmost seats, but straight
Expands with pleasure when it settles back,—
But know primordials no pain can reach,
Nor can they savor joy, to every change
Unsusceptible, or pleasant or adverse;
Hence with sensation must be unendowed.

Besides, if living things can sense receive
Alone from sentient atoms, those forming man
Must capable be of laughter and of tears—

Themselves philosophers—talk learned of seeds,
And deep into their own secret natures pry.
Assimilated thus to man, they must
Compounded be of seeds like those of man,
And these of others, for you cannot stop.
If this wild raving seems, then needs confess
The laughing may from what can't laugh proceed,
And the perceptive from what can't perceive.

We all are sprung from a celestial seed ;
One Father is to all ; one Mother Earth
Receives the genial showers, and pregnant made,
Brings forth the shining grain, the herb luxuriant and
The human race, all animals in their kind ;
Since she fit food supplies, nurtured by which
They joyous live and propagate their kind.
Thus rightly she the general mother's called.
All back returns to earth from earth that springs ;
And all sent out from the ethereal courts
The ethereal courts receive, again reclaimed,
But deem not less the primal seeds etern
That float in things—in birth emerging now—
And now in death as suddenly dissolved.
But the Destroyer cannot them attain,
Or them impair ; their bonds alone dissolve,
That thus left free unite in other forms—
By change of order—combinations new
Creating all the drapery of the world—
Objects of sense, the denizens of time—

The heavens, the sea, the earth, the sun, the stars ;
All fruits, and trees, and animals, and man,
From seeds in all eternal and unchanged.
That you may know how great the import is,
How elements are ordered and combined,
And what impulses they can give or take,
As in our verse the self-same letters form,
By combination's change, words all diverse,
Thus the same elements in things, by change
Of order, form, position, change the things.

And now to persuasive reason's voice attend ;
For Truth in aspect new demands belief,
Belief of what is new, so hard to yield—
For naught so simple, but, presented first,
Is difficult of credence, and, again,
Nothing so great, so wonderful, so rare,
But custom dulls the admiration due ;
For see the glorious light of sun and moon,
The all-resplendent purple dome of heaven,
Where dwell the fixed, where dance the wandering
fires.

What could more wond'rous seem, more rare, if now
To mortals, shown sudden and unawares,
What less within anticipation's scope !
Yet mortals satiate with the sight, scarce deign
To lift to heaven an unobservant eye.
Cease, Memmius, then, by novelty alarmed,
My reasoning to reject ; but rather weigh,

And what is true accept, what false resist.
For now the mind reason, her guide, demands,
Since space is limitless, what is beyond?
Beyond creation's walls, what there is found,
In those far-distant regions which the soul
Alone can reach, borne on free wings of thought.

First, then, since space on every side extends,
Above, below, around, unlimited and vast,
As I have taught, and Nature's self proclaims,
How can it be with truth consistent deemed,
When the vast womb of space lies open wide,
With bounds unbounded to infinitude,
And endless elements in endless rounds
Creative float throughout unending time.
How can we then suppose, known what we know,
One single earth, one air, one scope of sky,
Should unattended from the turmoil spring!
The more since here the World by Nature made,
By endless clashings of the elements,
Fruitless and blind, falling at length on those
That sudden coalescing laid the first
Foundations rude of the great ordered world,
Of earth, and sea, and animated tribes,—
Wherefore confess in other realms of space
Worlds like to this float in the deep abyss.

Matter abounding and with space prepared,
And no opposing cause, much must arise.

If then so great the store of elements,
Lives of all living cannot reckon up,
And the same power and nature dwells in them,
That here brought forth the World, we must confess
There 're other worlds in other realms of space,
Bearing their varied tribes of men and beasts—
In confirmation see, nothing is formed
Alone, but all in varied kinds. Regard
The animate world, insect, and bird, and beast,
And the mute fish in shoals banking the sea,
How all in numbers beyond numbers swarm ;—
And a like law holds in celestial space,
The earth, the sun, the moon and glittering stars
Exist not single but in troops immense.
And since the deep-set boundary of life
Is fixed for them, they pass from birth to death,
Like all the tribes that living teem the earth,—
Which well considered Nature's realm were seen,
Free acting, and exempt from haughty lords,
Her powers do all without intruding gods.
Oh, sacred rest of the Immortals ! Ye
That lead a placid age, and lives secure !
Who could avail—whose hands could hold the reins
Of chaos, and the deep, and them control ?
Who turn in equal course the orbs of heaven,
Be in all places, at all times prepared,
To draw the shades of night, and to withdraw,
Rebringing day serene ? Who thunder rule,
Reverberating often in a cloudless sky ?

Who guide the bolt in thickest darkness veiled?
That blindly falls now on your sacred fanes;
Now wastes its fury on the desert plains
Of ocean, and oft strikes down the innocent,
Sparing with wild caprice the guilty head?

Long time the Universe in embryo lay,
Till primal day arose to Earth and Sun,
Concreting from without, and atoms came,
By boiling chaos from her vortex whirled;
Whence sea and land swelled out their boundaries,
The canopy of heaven spread out in space,
And high above the wide terrestrial plains,
The lofty domes suspended were in air.
Each element, by natural impulse borne,
Seeks its own kind, and to its own withdraws:
Moist swells the moist, the earthy joins the earth,
The fire feeds fire, the liquid ether air,
Till all creative Nature hath built up,
Each to its height of being, and attained
Its final term; when vital veins no more
Can equal hold within, that which flows out,
And Nature bridles thus their further growth.
For, what we see by jocund growth increase,
And step by step to adult age ascend,
Takes and assimilates more than it ejects.
Abounding nurture revelling in its veins,
Assimilated, and not wide dispersed.
That much outflows and ebbs away from things,

Is manifest ; as more must join to build—
Till, reached their prime, their adult age declines,
And step by step they sink to their decay,
With greater ruin as they boasted growth.
For new supplies recuperative to support
The large reflowing tide Nature denies.
For all must be renewed by fitting food,
By that alone is propped and sustained ;
But all in vain when nurture can't suffice,
Nor Nature furnish what her wants require.
Then needs they perish—wasted by outflow,
And yield like all things else to outward force.
Since fails their age supplies restorative,
Nor them sustains, while ceaseless battering blows
Assail without—intestine ills within—
They die, and e'en the fabric of the world,
Thus one day stormed, shall wide in ruin sink.

E'en now the worn-out Earth with age effete,
Scarce a few wretched animals creates,
That in her early prime all tribes produced,
And gave to light the bodies huge of beasts.
For not, I ween, full formed above were they,
Let down from heaven by a golden chain,
Nor sprung they from the sea birth of the foam ;
But Earth engendered what she still sustains.
To children of her care spontaneous gave—
In rich abundance gave the shining grain,
The pulpy seed, and trees of every growth ;

Gave the sweet offspring, and the vintage glad,
Which now with labor huge she scant supplies
In niggard pittance to more pressing wants.
With weary steps we urge the weary ox,
And turn exhausted fields, that scarce return
Decreasing harvests to increasing toil.
The aged ploughman shakes his weary head,
So oft his labor unavailing proves ;
The barren sheaves upon his threshing-floor
So often mock his toil with chaff for corn.
How doth he then repining chide his lot,
Comparing present times with past, exalt
The fortune of his sires—the antique race,
Whose easy life, with piety replete,
Flowed joyous, free, when narrower bounded lands
Abundant harvests gave to lighter toil.
While the sad tiller of the impoverished vine
Impeaches march of time, and wearies heaven,
Alas! he not perceives great Nature fails!
Worn out with age the Universe decays,
Borne on and stranded on the shoals of Time.

END OF BOOK II.



BOOK III.

OF THE SOUL.

Praise of Epicurus.—Superstitious Fears of Death.—Nature of the Soul—Part of Man—Material—How composed.—Of Temperaments—Soul and Body mutually dependent.—Series of Arguments to prove that Souls are Mortal.—Epilepsy.—Souls cannot exist apart from the Body.—Suffer Change, therefore Perishable.—The Immortal cannot be joined to the Mortal.—The Soul being Mortal, Death is Nothing to Us.—Apostrophe of Nature to Man.—The Pains of Tartarus suffered in this Life—Consolations regarding Death.—Moral Reflections.

BOOK III.



OH thou who first on darkness so profound,
Light so resplendent by thy genius shed,
Revealing all the true concerns of life !
Thee do I follow, ornament of Greece,
And plant my footsteps where your footprints mark !
Not with vain hope to emulate thy fame
Thy course I follow, but from love profound ;
For how shall swallows with the swan contend ?
Or how the kid with trembling limbs compete
With the firm vigor of the matchless steed ?
Thou, Father and Discoverer ! thou suppliest
Paternal counsels to us in thy books !
There feed we on thy golden words, as bees
On vernal sweets in flowery meads—golden
Indeed thy words, and well immortal deemed.
For soon as thy audacious voice proclaimed
That by no mind divine ordained, the frame
Of Nature rose—our mental terrors fled ;
The limits of the world fell back amain,
The Universe of things stood forth revealed,
Moving and acting in a void profound.
The gods divine in peaceful seats are seen,

Which neither winds assail, nor clouds obscure,
Nor snow concrete, white falling violates,
But bathed in cloudless ether, wide with light,
Largely diffused the sacred stations smile.
Nature meanwhile to them all things supplies,
And naught doth e'er their peace of mind disturb.
The Acherusian courts are nowhere seen,
Although no shade of Earth e'er intervening comes,
But far beneath their feet all things are seen
Whate'er is done throughout unbounded space.
In contemplating this, a joy divine,
And holy dread possess my inmost soul,
That Nature, thus unveiled by thy power,
Apparent lies on every side disclosed.

Now, since I've taught what are the seeds of things,
Their forms how various, how spontaneous moved,
They float excited in perpetual round,
And how from them all things created rose,
Now must my verse in lucid order show
The nature of the Soul, and thinking Mind ;
Forth casting the foul dread of Acheron
That so profoundly troubleth human life,
Suffusing all things with a deadly shade,
And leaving naught of pure and liquid joy.
For though men say disease and foul disgrace
More to be dreaded are than death and hell.
And little need my reasoning they to show
That souls are mortal, made of flesh and blood,

Closely regard these boasters, you will see
They maintain this but as an idle vaunt,
Not as a thing established and believed ;—
For see them, once from friends and country torn,
Lone fugitives from men, distained with crime ;
Their restless souls bowed down with sharp remorse,
And steeped in misery, yet endure to live !
Where'er they come they dismal rites perform ;
Black sheep in sacrifice and offering bring
To the infernal gods ; hounded by fears,
In adverse hours more strenuously they bow
Their abject souls to Superstition's power.
Thus it befits in trying times to mark
Men, if their natures we would truly know ;
For then it is the soul true utterance gives,
The mask falls off, the man stands forth revealed.
Thus avarice often, and blind lust for power,
Drive wretched men to o'erpass the bounds of right.
Sometimes partners and ministers of crime
Spend days and nights in labor overwrought
To climb to fortune's height. These thorns of life
Are mainly fostered by the dread of death.
For, since disgrace and pinching want are seen
Sore adverse to secure and happy life,
They fancy them grim guardians of the grave.
Thus men wrought on by idle fears, impelled
To drive these from them and afar repel,
Their fortunes will cement with civil blood,
And slaughter heap on slaughter to gain wealth,

Rejoice inhuman round a brother's bier,
And hate and fear their kindred's social board.

By a like reason, from same abject fear,
Lean envy hath its power to waste the frame.
When men behold another high in power,
In loud complaints they mad vexations vent,
That he illustrious walks, with honors crowned,
While they neglected pine obscure. Stung thus,
They all will sink for statues and a name!

And oft to mortals haunted by this fear
Life is a burden, hateful is the light,
Till worn with sorrow, with a piteous heart,
They seek relief in self-inflicted death—
Forgetful that the fountain of their cares
Is this same fear. This, this is honor's bane;
This severs holy friendship's sacred bands,
And natural piety from its base o'erthrows.
Seeking escape from Acherusian courts,
Men sink their country, friends, and kindred dear.
For e'en as children tremble in the dark,
And all things fear, we tremble in the light,
And oftentimes fear things no more worthy fear
Than what affrightens children in the dark,
Filling the future with vain phantoms dread.
These terrors and this blindness of the soul
Not by the sun's bright rays, arrows of day,

Can be dispelled—rather by reasoning sound,
Revealing Nature's aspects and her laws.

First, then, I say, the Soul, oft called the Mind,
Directress and governor of life,
Is part of man no less than hand or foot—
Although some doting wise men say the soul
No fixed location has, nor dwells in space,
But is a function of the vital frame,
A harmony called by Greeks, by which we live
A soul, though soul nowhere exists apart ;
As joyous health is of our frame condition,
Not a part, and so the soul—erring in this—
As oft we see, when sick, the body pines,
Another hidden part within may joy
Or sad the soul, the body sound the while ;
As foot oft suffers when unharmed the head ;
And when, the limbs enwrapped in gentle sleep,
The body lies relaxed, the senses sealed,
There's something still in us that roams in dreams,
And feeds on empty scenes of joy or woe
Now that the soul resides within the frame,
Nor is a simple harmony of parts ;
See life still linger when the limbs are hacked ;
Or see it fleet, see life desert the frame,
When a light breath the last faint sigh exhales.
Learn, then, from this, not equally the soul
Leans on all parts and finds support from all,
But elements of warmth and breath sustain

Life in the limbs and guard its keeping there.
Since then the soul is but a part of man,
Leave to musicians, as befits the name
Of harmony, whence'er derived; whether
From groves of Helicon transferred, or formed
By them, needing for art distinctive term,
Let them retain—do thou my further teaching hear.

The Mind and Soul, I say, conjoined are,
And by their union single essence make;
While, as the head and sovereign of the whole,
Reason sits arbitress within the breast;—
For there it is our conscious being dwells,
There fear and dread anxiety creep chill,
And soothing joys play flattering round the heart,
Which shows the soul is there that joys and fears.
The other part, the vital power diffused,
Moves at the impulse, and obeys the Soul,
That in itself takes cognizance, and joys
Though senses sleep, and thus an essence is,
And the divinity that inspires the frame.
As when some part, the eye or head, is racked,
We are not tortured throughout all the frame,
So Soul oft suffers by itself alone;
And oft with joy exults, when life diffused
Through joint and member unaffected is;
But when the Mind's tumultuous shock with fear,
Soul through all limbs suffers in unison;
Cold sweats and pallor seize upon the frame,

Falters the tongue, the thin voice dies within,
Thick darkness veils the eyes, the ears are stunned,
The failing limbs collapse, down drops the man—
Thus teaching that the Soul's conjoint with Mind,
And when assailed the body feels the blow.

And the same reason teaches that the Soul
And vital principle material is ;
Since it can move the limbs, the features change,
Govern and agitate the man entire ;—
Which only touch can do ; and since alone
Material bodies touch, such then the soul.
See too the soul and body sympathize,
As when some weapon comes with piercing power
Through bones and nerves, yet fails to reach our life ;
A languor overcomes, we sink to earth
For rest, the soul on rack tumultuous heaves,
The wandering will prompts vain attempts to rise.
Sure then the Soul material is confessed,
Since thus it suffers from a weapon's blow.

And now, to tell of what and how composed
The Soul, its essence what, my verse proceeds.
First, then, it is most subtle and minute,
As manifest from its quick glancing flight,
More rapid far than aught in nature else.
Now what's so rapid needs must be composed
Of atoms round and smooth and most minute,
That freely yields, by slightest impulse urged—

As water moves at any slightest force,
So voluble and round its elements ;
And honey's sluggish from cohering parts
Constituent, not smooth, minute, nor round.
The feeblest breath will chase the poppy seed,
And its light heap disperse ; while piled-up stones
Not Eurys' self can move. More mobile thus
The small and smooth, more stable large and rough—
And thus the Soul, so lightly moved, is shown
Of atoms round and smooth composed—a truth
Of ready service in our dark research.

How subtle, too, the nature of the Soul ;
To what minutest space it may withdraw
By forced compression, further facts declare
When the repose of death falls upon man,
And life and sense depart, naught tangible,
Appreciable by weight, to semblance
Sensible, is filed away ; death all respects
But vital sense and the warm breath of life ;—
Thus soul is formed of seeds compact with nerves,
That their departure leaves the encasing frame
To sense entire, no particle withdrawn ;
Like the aroma and perfume of wine,
Or odors sweet of ointment fused in air,
Where naught is seen to flee, nor balance nice,
By loss of weight, its parting can detect,
So subtle and minute their effluence ;
Thus from the body steals the Soul away ;

Hence passing small its elements must be,
Since their departure bears no weight away.

Think not for this its nature simple is ;
A light, light breath of air with vapor mixed,
And heat fleets from the dying frame, and thus
A threefold nature in the Soul's revealed.
But not all these sensation can produce,
Or vital motions give and world of thought ;
An essence still must come that knows no name,
Subtle, minute, and conscious being give ;—
Then vital heat and the mysterious power
Of breath's infused, and all is struck with life ;—
Then stirs the blood, sensation floods the frame,
The quickened nerves awake to tremulous sense,
And pain and pleasure thrills the inmost bones.
But should, perchance, too poignant pain invade
The seat of life, straight life deserts her seat,
The Soul exhales through every opening pore,
And the dull mass returns to native earth.
But pain more frequent strikes not thus so deep,
But on the surface plays, and, there confined,
Leaves the Soul's life secure entrenched within.

How in the Soul the elements are mixed,
The secret bond to which they vigor owe,
I fain would teach ; but native language fails
To furnish fitting terms for such propose.
But as I can I summarily will teach :

The diverse elements informing life
United act; their varied powers compose
A single power—as color, taste, and smell
Unite in things, and single body form.
Thus breath and heat and vital air unite
With essence all unseen—that subtle power
Which the initiatory gives, and thrills
The sentient vibrations through the frame—
Whose nature who can tell?—beyond our ken,
In lowest depths of being deep intrenched—
Soul of our Soul, the life itself of life.
Thus breath and heat and vital air unite
Throughout the limbs, and mutual empire take,
With one result for all; for did they act
Apart, all sense they'd sever and destroy.
The heat of soul is seen when anger flames,
And from fierce eyes a threat'ning ardor gleams,
And frigid air, attendant upon fear,
That sends a creeping shudder through the limbs;
While a more tempered aspect's seen to reign
In peaceful breast and countenance serene;
And more of fire in those whose fiercer souls
More easily inflame with gusts of rage;
As shows the lion's raging violence,
Whose breasts cannot tumultuous waves restrain;
While in the deer prevails the inconstant air,
That through their breasts shoots shudderings of fear
At stir of leaf, and tremulous makes their limbs—
While gentler air endows the placid ox

Placed thus between the lion and the deer—
Since ne'er assailed by firebrands of rage,
Nor torpid struck by darts of chilling fear.
And such the temper of the human race,
That howe'er trained and disciplined, it bears
Some traces of the natural stock ; nor can
Its innate ills be with their roots expelled.—
Thus one is headlong borne by gusts of rage ;
Another yields to fear, while bears a third
A balanced mind more tempered and restrained.
And thus they differ in a thousand ways,
Whose hidden causes it were hard to tell,
The reason give for such diversity,
Or track the windings of capricious souls.
But know, so little trace of natural stock
Will in the soul by discipline be left,
That naught forbids frail mortals to attain
A calm and tranquil life, befitting gods.

This nature held by body, to body is
The guardian and supporter of its life—
United so by intermingled roots
Inseparable only in their common death.
As from frankincense none perfume can pluck
And leave the while its substance all entire,
So Soul from body cannot ravished be,
Or separation know, but both dissolve—
So deep their fibres interwoven lie ;
In origin of being so endowed

With mutual and associated life,
That kindle sense by their joint influence.
Besides, the body is not born alone,
Nor grows alone, nor after death endures.
For not as water can exhale its heat,
Itself remain entire—not thus the soul
Can from the body part, but intervolved
They live together, and together die :—
Long before birth within maternal womb,
They vital motions take from common cause,
On common cause their being's weal depends ;
And when division comes to mutual life
They sink together in a common doom—
Thus joint their natures as their cause is joint.

If any now deny that body feels,
And feign the Soul diffused throughout the frame,
Catches vibrations we sensation call ;
Rebels perverse 'gainst manifested truth.
For what can we of our sensations know
More than what facts have given and revealed ?
But when the Soul is fled—no longer feels,
Say you, the body now become a clod.
True ; for it loses what was not its own
Peculiar property, but associate life.
For, see you not how much is lost by age—
How sense by sense goes out, and leaves alone
A wretched remnant as a prey to death ?

To say the eyes see nothing, but the Soul
Looks through the eyes as loopholes and perceives,
Is doting folly that the sense repels.
For when we on the too-resplendent look,
The dazzling rays embarrass quite the sight.
But were eyes loopholes this could never be,
But, they withdrawn, the soul more clear should see.

Nor to explain sensation will the creed
Of Democritus sage the more avail ;—
That elemental parts of soul are joined
To elements of body through the frame.
Since fewer are the elements of soul
Than those of body, and far more diffused ;
Minuter far, thus fitted to receive
Vibrations sentient that affect the frame.
Much strikes the body that don't reach the Soul,
As the light dust that settles on the limbs
We don't perceive ; nor falling dews at night ;
Nor the thin threads by spiders deftly wove,
That interlace our steps at early dawn—
Nor the light tunics that the insects shed,
The floating plume of birds, or downy seeds
That from their lightness scarce avail to fall.
Nor do we feel each individual step
That the light-footed insect running plants.
For many atoms must aroused be
Conjoint with nerves, and many motions spring
To give vibrations that can reach the Soul.

Not less the Mind sits at the gates of life
And dominates its being than the Soul ;
Nor can the Mind remain clothing the limbs,
For the least fleeting moment when withdrawn
The shepherd Soul, to animal life itself
A close companion that, dissolved in air,
Leaves aye the stiffened limbs to damps of death.
But life remains while Mind and Soul remain,
Unharm'd, howe'er the limbs be hacked ; the trunk
Of members reft, still—still to life adheres ;
As vision to the eye remains though torn
The organ'd eye, so pupil be unharm'd ;—
But if that central ray be pierc'd, forthwith
Light is extinguish'd, and blank darkness falls.
Such is the bond of Soul and conscious life.

And now, that you may know how Mind and Soul
Of living things have birth, and share mortality,
Receive the verse by grateful labor wrought,
To make it worthy of your dear regard.
Since Mind and Soul so close united are,
Regard them both as one while I proceed
Under one name, as suits my theme, to show
Equal mortality awaits on both.
First, as already taught, they are compos'd
Of atoms more minute than mist or smoke.
More mobile, too, by slighter impulse urg'd.
For oft in sleep we see high altars smoke ;
So thin the effigies that affect the mind.

As water flows from shattered vase diffuse,
And mist and smoke dissolve themselves in air,
Much quicker flows and perishes the Soul
When once dissevered from corporeal frame.
For when the proper tenement of earth
No longer can retain its airy guest,
How can it hold in the vast plains of air—
How long survive in sheer vacuity?

Besides, as Soul is with the body born,
And grows with it, it equally decays.—
As children tottering walk with limbs infirm;
Their infirm minds with childish thoughts accord.
When growing age robuster strength confers,
It reason brings, prudence, and firm resolve.
In later years, by rude assaults of age,
The body shaken sinks beneath the blows,
With blunted senses and decayed powers.
Then halts and wanders the discursive Mind,
Drivels the tongue, the childish temper dotes;
Of Mind and body equally all powers
Together fail and at one point expire.
Thus then the Soul, essential and entire,
As clothed with strength by age with age decays—
Wearied, worn out with what before upheld,
Dissolves, goes out, as smoke goes out in air.

The body racked with pain and fell disease,
The Mind with grief and all-corroding care,

Partners in suffering thus, so partners they
In the great close and article of death.
As in assaults of corporal disease,
The mind oft wanders and delirious raves,—
Or is with heavy lethargy o'erwhelmed.
Sometimes as buried in a lasting sleep,
Can neither hear the voice, the features know
Of those around recalling them to life,
Whose vain attempts bedew their cheeks with tears—
Perforce confess then perishes the Soul,
Since penetrable thus by sharp disease ;
For pain and sickness ministers are of death,
Too well we're taught by the thick-falling dead.

See, too, the man when wine mounts to the brain,
And through the frame the burning ardor runs ;
How follows soon the leaden weight of limbs
That staggering goes with intertangled legs.
Why thickens now the tongue—drivels the mind ?
Why swims the eye, and sighs and hiccoughs break,
With all that follows in the drunken train ?
Why this, but that the raging violence
Assaults and racks the soul in inmost seats ?
But what can thus be racked gives token plain
That when some cause more potent shall invade
Will perish quite, all future life debarred.

Sometimes, by dire disease, before our eyes
The man is felled as by a thunder stroke,

Foams at the mouth and groans, trembles, and raves,
Struggles with stiffened limbs and gasps for breath,
While ceaseless tossings rack the tortured frame.

Truly, because disease torments the frame,
As raging winds torment the yeasty waves—
Groans are wrung out, and sighs, in that the limbs,
Tortured with pain, the thickened utterance throngs
The well-paved passages of speech ; he raves,
Since powers of Mind, distracted, torn apart,
Are by the poison severed and expelled.

But soon as the cause of dire disease withdraws,
And the black humors of the infected frame
Back to their lair retire, the Soul revives,
And scattered sense by slow degrees regains.
While thus it labors, prey to fell disease,
Thus racked, entrenched within its fleshly fort,
How could it live dissevered in the air,
Unclothed of body, battling with the winds ?

The Mind diseased by art's appliance healed,
Gives presage sure of its mortality.
For parts to add or to detract alike,
Or order change, beyond appointed bound,
Must change the nature, be it what it may—
But the immortal no accession knows,
No diminution suffers, or decay,
For change is death of prior being ; thus
The Mind and Soul, or sickened, or restored,
Mortality reveals ; so truth wrestles

With error in a close embrace; arrests
Her fleeting form at every turn, and by
A double refutation stamps her false.

Oft men by slow degrees are seen to die,
And limb by limb to drop the vital chain;
The nails grow livid; feet and legs grow cold;
And step by step the clammy tread of death
Usurps the limbs, and dread dominion holds—
Since, then, the nature of the Soul is rent,
Nor comes it forth at once, whole in itself,
Armed and entire, it mortal must be deemed.
And should you think, perchance, it can retire
To secret chambers, there invest itself,
With sentient powers that limb by limb desert,
More exquisite sensation should appear
The soul endowing as it nears on death;
More sentient there where last it refuge takes,
Arming itself before its final flight.
But naught like this appears; needs then confess
The soul from body chased, hounded out—expires—
But grant the Soul could gather to itself,
The light of life that leaves the dying limbs;
Not less for this it mortal must be deemed;
Nor matters it, in point of mortal proof,
Whether it perishes dissolved in air,
Or in its clay-sacked citadel o'erwhelmed.

And since the Soul is but a part of man,

And dwells in fixed place, as eyes or ears,
Or other organs that preside o'er life—
As these dissevered can no longer feel,
Nor e'en exist, but fall corruption's prey—
So Soul divorced from body can't exist,
Nor being claim without its house of flesh,
Its casket, tabernacle, or containing vase,
Or what can yet a closer bond express—
For both alike their living powers possess
By union and conjunction, nor apart
Can they by Nature's law vitality enjoy ;
For as the eye torn from its living seat
No vision knows, so Soul from body torn
Unconscious sinks ; by marvellous powers entwined
With nerves and veins, it conscious lives therein,
Nor can, escaping to the fields of air,
New life enjoy, exult in ampler powers—
The air itself would animated be,
And take a living form, could it retain
Escaping souls that burst their tenement.
Again, again the soul, its fleshly veil
Put off, its vital breath exhaled, must be
Dissolved, since death comes from one cause to both
The breathing body and the thinking soul.

Again, as body cannot long support
A severance from the Soul, but sinks in quick
Decay corrupted mass ; how doubt the Soul,
Gathering itself from inmost seats, when sinks

The body tumbling in and crushed, must forth
Like smoke exhale from out its crumbling house—
Body to dust returning, forth the Soul
Must flow perforce from every opening pore ;
Existing only as diffused through limbs,
Dissolve it must with the dissolving frame ;
Dissolved and thus destroyed, before it can
Glide forth and float viewless in plains of air.
When moving yet within confines of life,
The Soul oft sinks, as longing to escape,
Then falls, each well-strung limb relaxed,
The features pale as in the dying hour,
And every power collapses through the frame—
As when one sinks, o'erpowered in fainting fit,
The trembling Soul seeks to regrasp the last
Departing links of life ; faint and more faint,
Loosed from its moorings in material frame,
Its being shaken to extinction glides ;
So little lacking to make death complete—
How then believe, from body driven out,
Weak spirit and exposed, its shielding lost,
It can exist eternal in the air—
Nay, any shortest instant can endure,
Much less throughout eternity of time ?
Nor does the dying man perceive his Soul,
Uncamping from the body make its way,
Now to the throat, now to the verge of lips,
And then, enfranchised, take its final flight ;

But rather sinks it in extinction lost,
Where 'tis entrenched in being's inmost seat.

Nor, were the Soul immortal, would it grieve
At death as dissolution, but rejoice
That, disenthralled and free, it can go forth,
Its weather-worn and tattered garment left ;
As casts in spring the burnished snake its slough,
The stag his bruised horns, the chrysalis
His scaly coat exchanged for airy wings.

And why are not the mental powers produced
In head or foot or hand, but fixed dwell
In their appointed seat, if not for all
A certain place be fixed for all to grow,
And where created, there must constant be ?
As limbs their place and due relations keep ;
No forms preposterous rise unnatural ;
The law of order rules ; causation's chain
Gives each appropriate place ; nor are flames wont
To glow in brooks, nor takes ice birth in fire.

Besides, if Souls from body severed are
Still conscious and immortal, they, I ween,
With the five senses must be full endowed ;
Not otherwise can we conceive that Souls
Can wander on the shores of Acheron.
Thus, painters and poets of the early age,
The disembodied spirits represent

Equipped complete with sentient faculties—
But how can eyes or hands or ears remain
To furnish forth the Soul to see and hear,
When these have all with the lapsed body sunk?

Again, since vital sense resides in all
The frame, and life 's in all; should any blow
Come sudden to divide compacted frame,
The Soul is severed by the self-same blow;
But what division suffers, severance in parts,
Immortal nature must thereby renounce.

They tell of limbs by the scythed chariot cut,
That quivering in the mingled slaughter lie,
In heat of battle, while the man himself,
Unconscious of the wound, perceives no pain,
Nor heeds the throb of mutilated limb,
So in the fight absorbed—but rushes on,
Truncate of limb, but truculent of soul,
Still brandishing the stump; nor recks the while
That severed arm and shield are rolling crushed
'Mid chariot wheels and hoofs of fiery steeds.
Another springs to rise on shattered leg,
Or mounts the breach, his sword arm left behind;
The head that rolls beneath the trenchant axe
A vital look retains and glaring eye,
Till life and Soul, shade after shade, depart.
The serpent, threatening with his forked tongue,
If cut in twain, each part dissevered, cut,

Writhing with torture from the recent wound,
Sprinkles the earth with gore; turned on itself,
The horrid head tears at its proper flesh.
How say you, then, there's soul in every part?
Then many Souls to single frame you give.
But Soul is single, and to single joined,
Is cut in twain, hence mortal must be deemed.

Again, were Souls immortal, and infused
At birth in bodies, why of anterior life
Remains there then in memory no trace?
But if so changed in every power, the Soul
No reminiscence of the past retains,
It differs little, this, I ween, from death.—
Wherefore we must confess what was before
Is gone, what now exists, created now.

And, if the Soul with animating powers
Be as a guest to finished body brought
When we are born—the threshold pass of life—
Why grows it with the body and the limbs?
Why rather not, as fitting, live alone,
With independent powers, as in a cave?
Which manifest facts declare it does not do—
For Soul is so with bones and nerves and veins
In union close conjoined, that e'en the teeth
Are keen partakers of the vital sense,
As prove the darting pains when set on edge
By crushing unawares a grating stone.

Hence needs believe Souls live not, without birth,
Nor freed from death's wide, universal law ;
For how believe a thing brought from without
Could be with nerves and bones so intertwined,—
Or, if it were, could go exulting forth,
Safe and unharmed, they crumbling in the dust ?
And, if you think the Soul is from without
Poured in, diffused through every quickened limb,
So much the more 'twill perish as diffused ;—
For what can flow 's dissolved, and so can die.
As food diffused, through vital ducts and veins
Is changed thereby, and a new nature takes.
And so the Soul, though new integrant thing,
To body flowing is thereby dissolved ;
A power poured over, all informing all
With life, and ruling all, a being new
Must take, nor thus can it exist, exempt
From proper natal, fixed funereal day.

In the inanimate corse remains there then
Seeds of departed Souls? If aught remains,
Not then the mutilate Soul immortal is.
Or goes it forth entire, the transient guest,
Leaving no trace behind? Why, then, in the
Fermenting mass of carcasses corrupt
Swarms such a knot of boneless, bloodless things,
In slimy waves inundating the trunk ?
For how believe souls living come to worms,
A separate one to each, or how conceive

Myriads of souls can throng where one departs?
Comes there a Soul to every germ of worm,
And builds itself a house, or thrust they in
To bodies fully formed? 'twere hard to tell
Why they do this, why toil they thus for pain;
Or why such bootless labor undergo.
Why Souls assoiled, by flesh unprisoned, e'er
Should suppliants be for pain, disease, and death;
Why crave a body but to share distress.
Or, grant they for corporeal functions pine,
How could the spiritual the material build?
For Souls cannot make bodies for themselves,
Nor from apart to perfect bodies come;
For how could separate substances unite,
Or in such subtle harmony combine?

How could fit Souls fit tempered bodies find—
Rage in the lion, in the foxes wiles,
Flight in the deer infused, from sire to son;
Did not in early age the disposition spring
From certain germs and grow with growing years?
Were Souls immortal, and could bodies choose
Or change, we animals should see fitted
With Souls diverse, unsuited to their kinds.
Then panic-struck dogs of Hyrcanian stock
Would fly pursued by the rapacious deer;
The vulture, palpitating, cut the air
In flight at shadow of the coming dove,
And reasoning animals rule unreasoning man.

Some falsely say the Soul immortal is,
But suffers change by mutability
Of the inconstant flesh; but what can change
Must be dissolved, and what dissolved must die.
Say they again, instinctive human Soul
A human body aye for lodgment seeks?
How then, I ask, becomes what now was wise
So weak and drivelling in the tender age?
Why not the infant dissert as the old—
The young as prudent as the age-confirmed?
If not from certain germs the mental powers
Gain strength, and equal grow as grows the frame,—
Forsooth for answer they must say the Mind
Grows weak and tender in a tender age.
But were it thus, they mortal it confess,
Since, changed to suit its infantile abode,
It loses consciousness of anterior life.
How could the mental powers keep equal pace
In growth and firmature with the growing frame,
How simultaneous they attain the height
Of their perfections in the flower of age!
Unless companions from the early dawn
Of being, they cohere in mutual life.
Why hastes the Soul to leave decrepid limbs?
Fears it to be imprisoned in decay,
Or overwhelmed in ruined tenement,
When length of days has brought its final term?
But the immortal can no peril fear,
Exempt from all assault—from all decay.

What more ridiculous, more a mockery seems,
Than that in troops Souls all immortal stand,
Attendant on birth-giving throes of beasts !
That spirits numberless, immortal, wait
The birth of bodies ; on the watch to gain
A lodgment there by haste, and hold by force !
Unless that Souls have custom, and a law
That the first comer shall possess the right
Of entrance, and vain combats thus compose.

As trees are never rooted in the skies—
As clouds float not in seas, nor fishes live
On land—as flows no blood in stocks, nor sap
In stones, but each keeps its appointed place,—
So, too, the Soul can never rise to light
Without corporeal frame, nor can exist
From nerves and blood estranged ; for, if it could,
Much sooner would that spiritual power
Invest a part—as foot, or head, or hand,
And dwell in man apart as in a vase ;
And since 'tis fixed where Souls can be and grow,
So much the rather, then, deny they can
Without the body rise—without it live—
Wherefore, when body dies, we must confess,
Wrenched from the body, too, the Soul must die—
What greater folly can the mind conceive,
Than the immortal with the mortal joined,
Can thus agree, and mutual functions share
Harmonious ? Ill-yoked companions they,

Diverse of kind ; ill-sorted to support
The rough encounters, rude assaults of life.
Or deem we it immortal, that it is
Full fortified against all hostile things ?
Or hostile, they approach and quick retire,
Vanquished and turned aside ere they can harm
That spiritual power ; how wide from truth !
For while the Soul shares bodily disease,
It has apart its own peculiar ills.
Dread of the future haunts ; ill-boding fears,
Corroding cares besiege ; bitter remorse,
The sins of bygone years, lost opportunities,
Like banded monsters howl, and ceaseless prey ;
Add raving madness, and the dismal cloud
Of blank oblivion that o'erspreads the powers,
Or in black waves of lethargy o'erwhelms.

Death then is nothing, and concerns us not,
Since Souls by nature mortal must be deemed.
And as no pain we felt in former times,
When to the strife the Carthaginians came
On all sides flocking, and throughout the world
All things turmoiled, in war's dread tumult shook ;
When doubtful 'twas under whose empire all
Of human things, and sea, and land would fall—
Thus we shall not be there when soul and body part,
Since by their union, only, we exist.
Then not existing, naught can us assail,
Nothing our senses touch ; though earth should mix

Tumultuous with seas, with ocean, sky ;
And could the mind and animating powers
Still have sensation when from body rent ;
Naught would it be to us whose essence is
In union and conjunction of the Soul
With corpor'al frame ; and e'en could future time
Our atoms reassemble after death,
And rearrange as now, till life renewed
Were given,—no import 'twere to us—no care,—
When once the chain of consciousness is broke—
As now 'tis naught to us what once we were,
In the long night of time, ere birth of things.
So naught 'twill be what time may bring of change,
To matter for the fleeting present ours.
Regard the past immensity of time
Unions of atoms infinite ; of those
That make us up, 'tis easy to believe
They oft before have been arranged as now,
Though memory no record doth retain.
Death, the dull pause of life, hath intervened,
And every trace from out her tablet razed.
For he to whom the future ill can be,
Must then exist that evil may befall.
But death extinguishes ; nor permits that he
Again himself shall suffer what's to come,
Or be a prey to apprehensive ill.
Hence we may know there's naught to fear in death,
Nor can they suffer who have ceased to be.

Nor differs he from one who ne'er was born,
Whose fleeting life sinks in unfleeting death.

When one you see indignant at the thought
Of what may happen to his corse in death—
To rot on dung-hill, be consumed by fire,
Or torn by beasts, know you his ring is false ;
Though he deny belief that there remains
Sensation after death, his thought belies—
Some secret instinct of the heart remains ;
Not wholly does he wrest himself from life ;
Something survives to his unconscious self ;
Though dead, he fancies beasts or vultures tear
His body yet alive, and mourns such fancied fate—
Asserting not his separate self, nor moves
From his projected corse ; but feigns himself
As standing by it yet, endowed with sense—
Indignant hence he mortal made,—nor sees
In death that's truly death there cannot be
Another self—to mourn a self that's dead !
And were it bitter after death to find
A tomb in maw of beast, how worse were this
Than burn on funeral pile, or suffocate
In sweets, or stiffen to the winds exposed
On the slab surface of a chilling rock,
Or crushed 'neath weight of dull incumbent earth ?

Still, with sad accents men the lot bewail
Of those who've sunk beneath the stroke of fate,

And cry "Alas! No joyous home shall thee
Receive again; nor wife, nor children dear,
To meet thy coming, haste to snatch the kiss,
Touching thy inmost heart with secret joy!
No longer canst thou be the guardian of thy fame!
Alas! one day accursed, unpiteous robs—
Robs thee of all the dear rewards of life."
But in their grief they little think to add,
That in that day no longing will remain
Within that tranquil breast for aught of these—
Which well remembered quickly would relieve
Their hearts from anguish, and their souls from fear.
"Ah! as in death thou sleep'st thou shalt remain!
Forever calm—forever free from pain!
While we stood near the horrid funeral pile
And wept insatiate as thou turned to dust—
No lapse of time shall from our bosom raze
The eternal grief." But ask such mourner now--
What is so bitter? Why should you deplore—
Why should you pine thus with eternal grief,
If all return to tranquil sleep and rest?

And thus men often upon festal days,
While holding in their hands the sparkling cup,
Their foreheads crowned with flowers, loud utt'rance
give—
"Short is man's hour of joy! but now it was,
And now 'tis gone, nor ever shall return!"

As if in death they any want could feel ;
That hunger them should pinch, or thirst should burn,
Or least desire could e'er their breast assail :—
With mind and body sunk in sleep profound,
None for himself doth life or aught require ;
Nor though the sleep should e'en eternal be,
Will the least wish disturb the peaceful breast.
Though not in sleep the principle of life
Flows in our limbs so languid and so dull,
But that aroused we rise to live again ;
Then less than sleep should death regarded be,
If less it can be than what is but naught ;
Since wide disruption follows upon death,
And no one wakes or rises up again
When once they've touched the dull, cold pause of
 life.

If Nature then should sudden utt'rance give,
Thus with loud voice the sons of men should chide—
“ Mortal ! what ail'st thou, that thou dost indulge
In such intemperate grief ? Why grieve at death !
If thy past life had aught of grateful joy,
Nor pleasures on you heaped, were unenjoyed,
Wasted, like water poured in leaky sieve—
Why not a satiate guest from life retire,
And take with tranquil mind secure repose ?
But, if enjoyment wasted were on you,
And life 's a burden, why seek more to add,
What, like the past, must perish unenjoyed,

But end at once your labor and your life?
Ingrate! for you what new joy can I find,
Since future must be ever like the past?
While now your body is not bent with age,
Your limbs are lithe; and no new joy can come,
E'en though your life long ages should outlast,
And you ne'er sink beneath the stroke of fate."
What could we answer but that Nature thus
Justly would chide, rightly the case declare.
To one in years, poor wretch! that should bewail
More than is right, lamenting he must die;
Should she not rather with fierce voice exclaim?
"Glutton! away, and cease your mad complaint!
The sweets of life o'erpast, your senses fail;
Since for the absent you have ever pined,
And present good despised, life through your hands
Has flowed unenjoyed—not unforewarned,
Doth death now at your pillow stand,
Nor sooner than that you, a satiate guest,
And of enjoyment full, might from the feast retire!
Quick, then, dismiss things foreign to your age;
To sons give place necessity compels!"
Rightly I think she'd act, and rightly chide.
Old things expelled must ever yield to new;
By one's decay, another be upbuilt,
And no one sink in gulf of Tartarus.
For newer tribes, materials must be found,
Which, their course run, alike shall follow thee!
Not less than now did former things decay,

And being yield to others by their death ;
For life's to none in full dominion given,
Its fleeting use—no more—is the sole gift to all.
Regard the past eternity of time ;
Before our birth 'twas nothing unto us.
Here Nature, then, as in a glass presents
An image of our future ; what so sad—
What so appalling in our death appears,
Where all remains more tranquil than a sleep ?

All that which of deep Acheron is feigned,
Doth truly only in our life exist.
No Tantalus in misery steeped, as poets tell,
Dreads the impending rock, torpid through fear—
But rather men by idle fear of gods
Tormented are, dreading what chance may bring.
No Tityus, on the banks of Acheron stretched,
Affords to vultures an eternal feast ;
Not though his limbs should cover acres nine,
Not though immensely spread the world they fill,
Could they for endless suffering suffice,
Or furnish matter for an endless feast.
But he is Tityus,—him do vultures tear,
The man by jealousy devoured, or racked
By anxious cares for any mad desire.
And Sisyphus in actual life we see—
The man who sues the people to confer
Honors and office, fasces and the axe,
And ever failing, shamed and sad retires ;

For empire vain to seek, that ne'er is given,
And in pursuit dire labor to endure ;
This 'tis to roll a-hill a struggling stone,
That from the topmost summit leaps amain,
With headlong violence to the plains below.

And those who nurse ingratitude of soul,
Who, filled with good, unsatisfied remain—
What can returning seasons do for them,
Bringing anew young life and varied joys !
Since never satiate with the sweets of life,
Their souls still gaping for a distant good ;
Fit image form, I ween, of what is feigned
Of blooming virgins pouring in a sieve
The flowing water, that escaping still,
They by no labor can avail to fill.

Cerberus, the Furies, Tartarus profound,
Forth casting from its jaws horrific flames—
And Ixion bound upon the torturing wheel ;
These no existence have nor truly can—
But direful dread of punishment in life
For direful crimes, is the avenging rock ;
Is stripes and torture, burning pitch and brand.
And were these wanting, still the conscious soul
Feeds aye the snaky fears, and dire remorse
The victim leaves not, but applies the lash.
Meanwhile he sees no limit to his pain,
Nor to his torture terminating bounds,

But dreads in death their infinite increase—
Thus, for the wicked, life grim hell becomes.

This also you sometimes to self may say :
“ Good Ancus closed his eyes upon the light,
Who better was insensate ! far than you—
And many kings, the powerful of the earth,
Who ruled great nations, ruled were by death.
E'en Xerxes' self, who bridged the mighty sea,
And gave his legions pathway o'er the deep—
With tramp of feet out-bragging raging seas ;
From dying body rendered up his soul.
The chiefs of Rome, the Carthaginians dread
The thunder-bolt of war ; great Scipio's self,
Gave like the meanest slave his bones to earth—
And, more than this, the godlike of our race,
Fathers of science and the joyous arts,
Companions of the Muses, and o'er whom
Sole Homer holds the sceptre, have alike
Sunk with the rest to the same deep repose.

When erst advancing age with warning came
To Democritus of the sure decay,
He unreluctant stretched his head to death,
And freely met him half-way in his course.
E'en Epicurus died, his course fulfilled,
Whose glory pales all glory of his kind,
As the sun rising pales the drooping stars.
Yet you hold back, reluctant still to die,

Whose life itself is but a living death,
Who wearest out in sleep the most of life,
Drowsest awake, and ever dwellest in dreams,
Bearing a mind o'ercharged with idle fears,
Nor canst discern the true source of thy ills ;
Beset, poor wretch, with miserable cares—
Floating in blind delusions of the mind,
And like a drunkard reel'st, unknowing where !

But could men once perceive the direful load
Is on their souls that grinds them with its weight,
Know whence it comes, to what it owes its power ;
They would not pass their lives as now they do,
Unknowing what they want, and seeking still
By change of place their heavy load to drop.
One, with the tedium of his house outworn,
From its proud portals hastes, but quick returns,
Finding abroad no respite to his pain—
And to his villa drives with headlong haste ;
Scarcely the threshold touched, he turns and yawns,
Or to the city drives like mad again.
Thus from himself each seeks a glad escape,
And finds it not ; which way he turns the ill
Still sticketh close and rankles in his breast.
Diseased in soul, he knoweth not the cause,
Which could he once perceive, all else cast by,
The Nature true of things he'd seek to know ;
Since the great question that importeth is
Not man's condition for a few short years,

But what remains to mortals after death—
What their condition through eternal time.

(What mad desire of life can us compel
To tremble thus, with doubts and dangers vexed!
Since certain bounds to mortal life are fixed,
Nor death can we escape, but all must die;
And living we but tread the round of care;
For lapse of time can but repeat the past,
And lengthened life no pleasure new can bring,
While to our minds the absent good appears
All present to excel; but when attained
Palls like the past, and 's loathed in its turn;
But all the while by love of life we're held,
Uncertain though it be in future time
What chance may bring us or what fate impend.
And though we know that lengthening out our life
Naught can diminish of death's ample reign;
For, though our life long ages should outlast,
Unending death will not the less remain—
Nor shorter will his term of blank extinction be
Who closed with yester sun his life's career,
Than his who sunk ages ago in death.

END OF BOOK III.

BOOK IV.

OF THE SENSES AND PERCEPTIONS.

Exordium.—Of Images—Their Nature.—Cause of Vision.—Various Phenomena of Vision Explained.—Perception of Distance.—Phenomena of Mirrors, and of Light and Shade.—The Senses to be Trusted.—Appearances Deceptive from Wrong Inferences.—How Senses are Acted on.—Sound—The Voice—Echoes.—Of Taste, Colors, Odors.—Perception, how caused.—Things seen in Sleep.—Phantoms.—Organs of the Body not formed by Design.—Desire of Food.—Of Sleep.—Dreams—In Animals.—Of Love.—Unregulated Passion.—Generation.—Connubial Affection.

BOOK IV.

I TRAVERSE fields untraversed by the Muse!
Through untrod paths I tread! Oh, dear delight,
To dip in virgin founts, large draughts to take!
Oh, joy to pluck new flowers and weave from them
A garland for my head that never yet
Hath decked a poet's brow—a garland earned—
In that I treat a lofty theme, devote
From Superstition's chains the soul to free;
O'er things obscure to pour the lucid song,
And deck them with the charms of poesy—
Thus wisely doing as the nurse adroit,
Or skilled physician, when they seek to give
To children sick the bitter absinth's draught,
Touch at the edge the circle of the cup
With honeyed sweets, that flattering the lips,
The thoughtless age may drink the bitter draught,
And caught deceived uncaptured be by death.
Thus I, since now my theme to many seems
Who know it not ungracious and severe,
Well seek, lest they my proffered guidance shun,
With studious zeal my reasoning to enfold
In the sweet accents of the Muse's voice;

And clothing things obscure in garb of song,
With pleasing art to win attentive ears
To mark my words, till, learned in Nature's ways,
Their worth and import they may truly know.

Since, then, I've taught the nature of the Soul,
From what 'tis formed with body joined, and how
Dissevered, it to elements returns ;
I now must treat a close connected theme,
The effigies and images of things—
That like to films from off their surfaces
Fly thick through air, and to us waking come
To fright the mind—but oftener in sleep,
When wondrous sights, shadows devoid of life,
We seem to see, dim harrowing the soul—
Lest you should think that ghosts from Acheron
Shades of the dead, among the living flit
With visionary life endowed, and haunt
Our paths,—or that in death aught can remain,
When soul and body, sunk in equal doom,
Have back returned each to its elements.

Things then, I say, from off their surface throw
Thin effigies—light films that well preserve
The forms and semblances from which they flowed—
A truth the dullest mind can apprehend ;
Since many things, 'tis plain, such forms emit—
Some light diffused, like smoke from burning pile,
And some with firmer texture and condensed,

As when in summer the cicada casts
Her slender tunic, or the gliding snake
Puts off his glossy vesture in the brake,
As shows the thorns decked with the silken spoil.
From this 'tis easy to conceive how things
Can images emit from surfaces ;
For why such films should drop away from things
And not these thinner films, 'twere hard to tell—
Since on their surface lie atoms minute,
Prepared to part, outline and form preserved—
And all the quicker as in front rank placed,
Nor hampered by a thronging multitude.
For much we know, discharged from inner seats,
And colors fleet from off their surfaces ;
As oft we see the dome, like awnings spread
Over wide theatres, yellow, red, or blue,
That undulating float on masts outstretched,
Tinge with their color all the scene below ;
Make glow the hollow circuit, till within
The robed Senate and the painted scene,
Their colors toned are melted into one ;
And all the more, more shut from light of day,
By close, inclusive walls, will all within,
Bathed in such radiant flood, blush forth till all
With grace and beauty laughs the tremulous scene.
While thus such floating veil can hues diffuse ;
All things can well light images emit,
Endowed with shapes, subtle, refined, and drawn
From surfaces, apt counterfeits that can

Preserve the form and semblance whence they flowed.
But odorous smoke, thin vapor, and the like,
Sprung from within, and, struggling to escape,
Are rent and severed by the devious course,
And come not out entire; but the thin film
Of surface color in the front rank placed,
And ready to depart, there's naught to rend.
For, as in mirrors, or the watery glass
Of a smooth lake, or in a polished plane,
Fair shapes appear in likeness of the thing
Reflected thence; they needs consist of images
Which well preserve the forms from which they flowed.
Sure, then, there are thin effigies and forms
Which singly are unseen; but when outpoured
In a continuous and impulsive flow,
Give, by reflection, images of things;
Not else could they such apt resemblance show.

Now mark and learn how thin their nature is
Of images—since first beginnings are
Less than what sight can first avail to see.
And further to confirm how fine they are,
Know animalculæ exist so small
Their parts can't be discerned; how infinite
Minute must then their organs be!
The joints, and membranes, and pulsating heart—
What the minuteness of component parts!
Why speak of nerves along which lives the sense
Of feeling, and instinctive acts of mind!

How they composed,—minute beyond degree,
Or power of thought, minuteness to conceive.
And herbs there are that odorous waves diffuse ;
Wormwood, and rue, or bitter centaury,
If lightly touched, their myriad forms, through air
Fly thick invisible ; that you may know
Idols and images innumerable float
In air, yet powerless to waken sense.

Think not that images that flow from things
Wander alone ! since others spring from them—
Spontaneous spring, and fill the embracing air,
With floating forms of every shape around,
Nor cease their forms dissolving to renew ;
Shifting themselves to every Protean change ;
As oft we see clouds thickening aloft,
Stain the serene of heaven with changing forms,
With swaying motions peopling the air ;
Sometimes a giant shape seems as in flight
To draw a lengthened shadow o'er the sky ;
Or monster huge, drags or drives on the clouds ;
Sometimes the form of precipices huge,
Mountains, and rocks abrupt, and hills on hills,
Above the mountains rise, and hide the sun.

And now to tell how swift these idols glide
In a perpetual stream ; how glide and die !
A something always flows from surfaces
Like arrowy ravs forth darting on all sides.

And these encountering thin, transparent glass,
Pass through unharmed; but falling on the rough,
As wood, or stone, shattered, no image give.
But lighting on the polished and the dense,
They pass not through, nor shattered are;
The ready brightness them reflects entire.
Thus mirrors, see, with images o'erflow—
However suddenly, for how short a time
You aught present, an image instant comes,
That you may know how ceaselessly they form
And flow, in stream unintermitted these—
The thin consistencies and forms of things.
For, as the sun with floods of light o'erflows—
A dazzling deluge, inundating all—
Thus, from all things—ever—on every side,
Unintermitted images are poured;
As you may see, where'er a mirror turns;
Straight in its silent depths, the scene responds
With apt similitude of form and hue.

Ofttimes it happens that serenest sky
Is with a thickening canopy o'erspread,
As if all shades had fled from Acheron,
And filled the vault of heaven—so thick a night
Hangs o'er our head, such direful forms of fear.
But none can tell how thin their effigies,
Nor can words paint what mind can scarce conceive.

And now with what rapidity borne on,

These idols—what velocity endows,
To traverse instant boundless realms of space—
I fain with few, but flowing words would tell.
The swan's low note more moves the listening soul,
Than the loud clamor of the incessant cranes,
By winds dispersed to all the clouds of heaven.
Know, then, the lighter still more swiftly move,
As solar rays forth darting light and heat—
Formed as they are of most minutest parts—
Light, light impelling in continuous stream.
Thus images with like uncumbered ease,
Dart instant through immeasurable space,
Lightest of airy things, by rearward cause,
Borne onward and impelled, of texture rare,
To permeate at ease all interposed,
And flood with shapes the intervening air—
And if such corpuscles minute as light,
And heat, launched from sun's inmost seats,
Can instant traverse the ethereal space—
Why should not images in front rank placed,
Forth darted whence they spring, and, clogged
By no delays, much farther, quicker go !
Companions of the light, with equal speed,
To overcome with it the plains of space,
With swifter flight e'en reach remoter goals,
Than can the winged radiance of the sky ?
In proof of their ineffable swift flight
In open air, let but a finger's breath
Of lucent water spread, forthwith will all

The starry skies, the radiant orbs above,
With answering face appear ; that you may know
An instant image drops from heaven to earth.
Hence, then, you must admit that bodies flow—
With marvellous rapidity must flow
From things, glance to the eye, and vision wake.
So odors flow from things odoriferous,
Congealing cold from ice, from sun fierce heat,
While briny vapor rising near the sea,
Corroding wastes the walls along the shore,
And mingled sounds cease not to float in air.
A savor salt comes to us near the sea,
And bitter flavor where they absinth bruise.
Thus, from all things something that wakens sense
Must on all sides unintermitted flow,
Since always we perceive, and smell, and hear.

Again, what in the dark by handling we perceive
Is recognized the same when seen in light.
Hence, a like cause affects the touch and sight—
And what is felt in darkness as a square,
Can have in light none but an image square ;
Which then is the efficient cause of sight.
Hence, from all things, and on all sides are poured
The images of things ; for wheresoe'er
We turn our eyes, they meet the obvious scene,
In form appropriate, and color decked.
Nor this alone, but distance we perceive ;
And this alone to images is due,

Since they protrude the intervening air,
And, gliding with it to the eyeball come,
Brushing the pupil with such airy wing,
That sense of distance thus instinctive comes,
As more or less of air glides glancing by—
And this so rapid, that in single act
We see a thing, and what its distance is.
And let it not blind wonder rouse, that these
Fleet images, thus streaming to the eye
Are viewless; yet by them all things are viewed—
As when assailed by piercing wind, or cold,
The atomic wind or cold we don't perceive,
But rather their effects resultant feel,
As if of something beating from without—
If with a finger we a pebble push,
We but its dull, investing color touch,
Nor this do we perceive; for touch reveals
Naught but the hardness of the thing that's touched.

Now learn why the reflected image in a glass
Appears beyond the mirror's polished plane,
Deep bosomed in its visionary depths—
As when the open door reveals to sight
The outward scene, a double image comes
Of world within, and world without; since light
From nearest things comes first, then from remote;
So when an image from the mirror comes,
Protruding air between it and the eye,
It is the first perceived; but with the glass,

Forthwith comes, too, the image mirrored there,
Protruding further air ; the which perceived,
Causes the image to appear remote.

And little wonder this, since mirrored forms
By traversing two aërial spaces come !

If now you ask why what's in mirror seen
Appears reversed—the left become the right—
'Tis that the image falling on the plane,
Reflected, is turned back, not unimpaired.
As when the plastic mask of wax, or clay,
Dashed sudden 'gainst a wall, backward reverts ;
The eye, and cheek, but now that were the left,
Become the right by mutual interchange.
From mirrors too, to mirrors fitly placed,
The image flits and multiplies its form.
Retired scenes in dark recesses hid,
May thus be dragged to light through winding ways ;
The fluent image formed, and glancing quick
From glass to glass is changed, and then restored.
Curved mirrors rounded—shaped, give images,
Where right responds to right,—either because
The image, flected back from side to side
Of polished plane, comes to us twice reversed ;
Or the curved form of mirror makes it turn.
The reflected image, too, appears to move
With us when moving, and with us to stop,
A servile minister upon our steps.
If from before the mirror we withdraw,

Straightway no image comes ; for with what slope
They fall, Nature compels them to revert again.

The eye shrinks from the too resplendent light ;
The sun will blind, gazed on with orb direct ;
So heavily fall the rays through the pure air ;
They pierce the eye, and its fine tissues rend.
The jaundiced eye sees all with yellow hue ;
So many atoms of that color fill
The orb of sight, they images affect,
And them with their contagious color stain.
We out of darkness see things done in light ;
Since nearer murky air that first invades
The eye is by succeeding lucid purged,
That coming clears the way the dark obstructs :
Then straight in open paths the images
Of things appear, and struggle to the sight.
But what's in dark we in the light see not ;
The thicker air of darkness coming, chokes
Each prompter visual ray, and smothers all—
Square turrets, crowning distant, lofty height,
Appear as round, their sharpened angles lost,
Their images in air abraded, worn,
And rounded-off, angles effaced they show
Not like the truly round seen close at hand,
But shadowed to a likeness of the round—
The obsequious shadow that attends our steps,
When walking in the sun, seems of itself
To walk with us, and every gesture mock,

Yet nothing is but space deprived of light ;
For, where we go, straight our intrusive form
Robs of the light successively each place ;
Resuming brightness when such bar's withdrawn
Thus with our steps the shade attendant moves ;
Since rays of light continuously stream out,
And perish as they stream, like wool licked up by
fire.

Thus easy 'tis earth to despoil of light,
And to restore, effacing dismal shades.

But yet we don't admit that sight 's deceived ;
Its office is to mark the light and shade ;
But whether 'tis the same or light or shade,
Now here appearing, and now passing there ;
Or whether all is done as I've explained—
This reason must discern its office fit ;
Nor can the eye pry to the depths of things,
Their natures scan. Exact not then too much,
Nor tax the eye with errors of the mind—
The ship that bears us stationary seems,
And what on shore is fixed, appears to move ;
The hills and plains toward which our vessel tends,
Seem rushing on us, flying toward the stern :—
The stars look fixed, in the ethereal depths,
Though all are dancing in perpetual round ;
They rise, and to their far-off setting haste,
With lucent orb accomplishing long career :—
The sun and moon their stations seem to hold,

Though facts reveal how rapidly borne on:—
The mountains rising in the middle flood,
The far-off peaks, upstanding from the sea,
Though wide disjoined that fleets might pass between ;
At distance viewed one land appear to be :—
To children dizzy with their whirling play,
The fixed walls whirl round them when they stop ;
The pavement undulates to waving frieze,
And tottering columns threat an overthrow.

When with returning day the rising sun
Rests on the mountain tops his tremulous rays ;
Though close at hand his fervid orb appears,
On the hill-top, a thousand arrow flights—
Between us yet and him the plains immense
Of ocean spread, stretched to the ethereal shore ;
And leagues on leagues of land are interposed,
That savage races hold and tawny tribes.

A finger's breadth of water in a cleft
Of the paved way, to the astonished gaze,
Opens as deep a vault beneath our feet
As high the arch of heaven overhead ;
That other stars and skies we seem to see,
A wondrous heaven bosomed in the earth—
If, stopped our steed in crossing rapid stream,
We gaze upon the waters hurrying by ;
The waters seem at rest,—the standing steed,
Struggling against them, seems to mount the stream.

The long-drawn porticos on pillars propped,
When viewed from either end in all their length,
Seem drawn together by perspective laws ;
Roof nears the pavement, side approaches side,
And cone-like sharpens to a point at end.

To the wayfarer on the sea, the sun
From ocean seems to rise, in ocean sink.
Not that the sight deceives, for naught is seen
But the round ocean girdled by the sky :—
To unaccustomed eye the floating ship
Appears to waver, and with broken oars
To struggle on the waves, the part above
The water showing straight, while all below
Seen through the waves refracted, broken, bent,
Seems upward struggling to the topmost float.

When by the winds through heaven the fleecy
clouds
Are borne at night, the shining orbs appear
To glide with adverse tide against the stream,
Tending above to some supernal goal—
If be by chance one eyeball forced aside,
A new scene comes, and all that we behold
A double image bears—double the lights ;
In double scene around move double men.

When sleep reposeful hath bound up the limbs,
And all the body lies in rest profound,

Oft as awake we seem our limbs to move,—
In thickest night seem to behold the sun
And light of day ; to narrow couch confined,
Our skies, our seas, our hills, and woods we change ;
Traverse wide plains with buoyant treading feet ;
Hear world of sounds where night's dread silence reigns,
And, silent, seem the loud response to give.

And many things of this like marvellous kind
Might seem our senses to impeach ; wrongful,
For these appearances deceptive are,
From inferences of mind thrust in and joined
To evidence of sense,—regarding things
As seen, that never were to sight revealed—
So hard it is to draw distinctive line
Between the apparent and the sure, and separate
Reality, from fictions of the mind.

But those who say that nothing can be known ;
Know not e'en this, confessed they nothing know.
Who strives with them must treat an idle theme,
Who turn their backs on their own proper light.
But grant this known, the question will remain,
When in all other things no truth they find—
How know they this—what 's knowing and what not ?
Where find criterion of the true and false ?
How prove the doubtful differing from the sure ?
All apprehension of the truth proceeds
From sense, nor can its witness be impugned ;

For that requires something of greater faith,
That shall instinctively refute the false.
But what is there can greater confidence claim
Than sense? What challenge equal trust with that?
Can inference drawn from false appearance weigh
Sense to impeach? Founded itself on sense,
Were that not true the inference must fail;
Or can one sense claim precedence and rank
Above the rest—the ear confute the eye,
The touch convict the hearing of deceit,
Or taste arraign the evidence of touch?
Nay, well I ween they varied functions own,
And wield divided power, and separate reign,
With diverse functions in divided spheres—
For what is hard or soft, or hot or cold,
Must be determined by its proper sense,
And recognized as such apart the rest.
Colors show but themselves, and qualities
With colors joined, are judged of as apart.
Nor can the senses take themselves to task;
Since all, at all times an equal credit claim;
And that is truth which sense presents as such,
As such must be received, where'er revealed.
And though our reason e'en should fail to show
Why what is square at distance seems a round;
'Tis better to allow that reason halts,
Than from our hands let evidence escape;
Truth in her inmost seat to violate,
And, self-destroying, the foundations sap

On which our life and safety must depend.
Not reason only fails, but life itself,
Unless we trust all confident to sense ;
And shun to tread such mined and crumbling paths—
Holding vain babbling all the host of words
Against the senses drawn in long array.
For as a structure raised on plumb-line false,
However small it deviates from the true,
All false appears, discordant and unsound,
Leaning and toppling and bent awry,
Already falling or about to fall ;
So reasoning must be false, depraved, unsound,
Founded on sense, if senses can betray.

Now, how each sense fit object can perceive
'Tis easy to explain : first sound and voice
Through ear insinuate, there acts on sense
With body ; for all sounds corporeal are,
Since like to body they our organ strike—
And voice escaping to the spherical air,
Roughens the throat, abrades the passages ;
Thus of material atoms is composed,
Since it can wound what is material ;
And speech continued from the rise of dawn
To shades of night exhausts the nerves and strength--
Abstracting thus needs must corporeal be.
Roughness of voice again from roughness comes
Of atoms, as the smooth from atoms smooth ;
Nor do like elements invade the ear,

When Phrygian pipes drone heavily, or when
The region echoes with the bellowing horn—
As when the swans in vales of Helicon
Utter with liquid voice their sad complaint.

When marvellous formed we voices forth emit,
The pliant tongue, artificer of words
Upon the lips articulately framed,
Sends forth fleet messengers,—for distance meet,
Their modulated form the words retain;
But farther passing, disarranged by air,
Melt to confused sound;—the thought exhales
From airy vehicle by lengthened flight,
And sound alone comes murmured and involved.
So when the edict, winged by herald's voice,
Comes to all ears, the articulate voice sent forth
Divides itself to each particular ear,
And stamps the form of modulated words;
While all the voice that falls not on the ear,
Borne wide, is lost—through the thin air diffused—
But sometimes falling upon solid walls,
Like to a masker in a thin disguise,
Light Echo comes with faint and shadowy words;
Revealing thus how 'tis that oft the rocks
In many a lonely place return the sounds
In order due, faint syllabled in words,—
When with loud voice upon the wooded hills
We call to our companions wide dispersed,
In faint response thin vocables return.

Thus there are spots that for one rallying shout,
 Will seven shouts return, with gradual fall
 And truthful iteration, that it seems
 Hills vocalize to hills. These are the spots
 Where haunt goat-footed satyrs and the nymphs,
 As shepherds tell, and fauns, an airy troop—
 Whose jocund noise and play night wand'ring oft,
 They feign, the pensive stillness breaks with sound
 Of stringed lute or soothing plaint of song,
 Joined with shrill-sounding pipe, as o'er the stops
 Light fingers play—the awe-struck hinds, peering
 Through leafy screen at distance, think they see
 Amid the boughs the shepherd Pan, shaking
 The leafy crown of his half-human head ;
 As with bent lip he sounds his reeden pipe,
 That ceases not to pour the woodland lay.
 And many marvels of this kind they tell ;
 Lest we should think the solitary place
 Deserted by the gods,—or other cause,
 They people them with these fantastic troops—
 Delighting in the marvellous ; (for know
 The human race have all insatiate ears !)

And now it little wonder need excite
 That sounds can pass, and sense of hearing wake,
 Where fails each visual ray, no image seen ;
 Thus through closed doors discourse is held ; for
 sounds
 Can pass unharmed through many a winding way,

While images require a path direct.
And further, sounds divide in many parts—
And from one source a multitude outfly,
As from a fire the briskly glancing sparks
Fill with a luminous shower the compass round ;
Thus, all the circuit with one voice is filled,
And each withdrawn recess vibrates with sound ;
While visual images move in line direct,
Forth tending on the course they first are sent.
Thus none can see what's placed above their heads,
But sounds can hear, from all the sphere around.
Yet voice by barriers deadened sinks to noise,
Confused and void, articulate words suppressed.

And now how palate and the tongue perceive
Flavors and taste, 'tis easy to explain :—
Taste, then, holds seat in regions of the throat ;
When tooth-armed jaws compress convenient food,
As by the hand might be a filled sponge—
The savory juices o'er the ducts diffused,
Of the nice palate, the involved pores,
And winding passages of the dewy throat,
Awaken taste in its retired seats.
If smooth the atoms of bedewing juice,
They grateful come, and gratefully excite
The sensuous regions of the absorbent tongue ;
If rough they wound the organ and offend.
The savored gust to palate is confined ;
For when the food the fauces has outpassed,

How savory ere, it ceases to delight—
 Nor matters it with what the body 's fed ;
 If what 's received concocted well can be,
 And the humected stomach keeps its tone.

And now, my theme pursuing, I must tell
 Why different viands different palates please ;
 Why what 's to some revolting and austere
 To others grateful and delightsome comes ;
 Why what is food nutritious unto these
 Is death and deadly poison unto those—
 So great their distance and diversity.
 The hellebore infused—a deadly draught
 To man—fattens the nibbling goat and quails—
 The dreaded serpent with saliva touched,
 Warred on by all that's human, and enraged,
 Turns on himself his own envenomed tooth.
 This to explain, befits it to recall
 How varied atoms mingled are in things ;
 How animals that draw their daily life
 From daily food, differing in form extern,
 Differ yet more within in ducts and veins,
 Organs, and membranes, and absorbent pores
 Of mouth and palate, where the taste resides.
 Since these, then, are narrow in some, or wide,
 In others square or round,—befits it that
 The shape of channel suit the atoms' shape.
 Hence, what to some is sweet, to others is
 Bitter, as forms are fitting or adverse.

And in like manner all may be explained—
When fever rages from o'erflowing bile,
Or fell disease invades, whate'er the cause;
Straight every function is deranged within,
And food that once was grateful now offends,
Or hostile turned, provokes the bitter pang;
E'en honey, sweet distilled from sweets, contains,
As all may know, the bitter with the sweet.

How to the nostrils winged odors come,
I now unfold. First, many things there are
From which the varied waves of odor flow;
And as they flow address themselves to all;
But not alike in shape, they suit not all:—
The honey's fragrance draws the bees from far;
The vultures gather at first tainted breath
Borne on the air from the outlying dead;
The hound's keen scent prophetic points where passed
Clove-footed deer; the bright white goose that waked
The capitol's defence for early Rome,
Scents from afar the sweaty taint of man.
Thus varied powers of smell the varied beasts,
Like a protecting Providence, attend—
A guide to fitting food—a warning guard,
Instinctive, them from poisons to defend;
And thus preserve their races from decay.
These various odors varied distance reach,
But all less ample circuit fill than sounds,
Or the far-reaching sight; emerging slow
From inner seats more languidly they rise,

And, faintly floating, lose themselves in air.
That odors spring from deep recess of things
Is manifest, since what is bruised becomes
More redolent than before; as clearly, too,
More gross their atoms are than those of sound,
Since walls they pass not, where well sounds can pass
The odoriferous, too, its hidden seat
Betrays not, or at most, dimly reveals.
Benumbed in air, its waves float languidly,
Nor cunning tell-tale to the nostrils comes,
Revealing secret source; and thus we see
The hounds oft puzzle on a doubtful scent.

Nor taste and smell alone come variously;
Colors, the visual images of things,
Suit not alike all eyes, but some offend.
The lion fierce shudders when he beholds
The early cock, whose shrill, clear voice is wont,
With his applauding wings to chase the night,
As with loud voice he summons up the morn,
And at the sight turned quick affrighted, flies—
Since some emission from the strutting bird,
Harmless to us, his eyeballs pierce and pain.

Now learn in few words what acts upon the mind;
What, and whence come our mental images.
First, then, innumerable idols float in space,
Of texture finer than the attenuate thread
Of spider, or the woof of filmy gold.

More subtle, too, than images of sight,
Since they through rarer pores can penetrate,
And sentient make the mind in inmost seats.
These ofttimes meet in air, unite and form
Portentous images ; Centaurs perchance,
Scylla or Cerberus, girt with barking dogs,
Or shadowy ghosts of those whose bones long since
Lie buried deep beneath the silent earth.
For everywhere these images are formed—
Part emanate from things, and part from these
Spontaneous formed, disport themselves in air.
For sure no image of a Centaur from a Centaur came,
Since none exists ; but image of a horse
Might easily cohere with that of man.
Thus, all extravagant and wild dreams are formed
From these light, airy, floating images
That wand'ring, free, subtle impressions give ;—
For light the mind, and marvellously moved.

That thus it happens, further know from this :
By self-same process does the mind perceive
As sees the eye ; an image comes to both,
Nor differing, but attenuate most the mind's.
Not otherwise, when slumber steeps the limbs,
To mind awake the phantoms thronging come,
That present were to sight throughout the day.
'Tis thus we seem to see the buried dead
Returned to life ; since sleep oblivious then
Subdues our powers, o'ermastering the sense.

Nor can we bring the false to test of truth,
When memory slumbers on Lethean bed,
Nor those recall as dead who move along
Our mental imagery as though alive.
And let it not surprise that images
Can in harmonious numbers move their limbs,
As oft in sleep the phantoms seem to do.
Since as one shadow fades, another comes
Its place to fill with varied attitude,
But seems the same, so fleet they changing come.

How many questions throng for answer here!
How much to be cleared up, if all we'd clear!
For first 'tis asked how comes it that the mind
Commands conceptions, and its thoughts at will?
Wait then the mental images on mind,
That as we will obsequiously they come?
If sea, or land, or sky be in our thought,
Or gathering of men, battles or feasts,
Straight to our inner eye the scene appears
With bright but shadowy subsistence decked.
Does Nature at our beck then images
Prepare, and instant to their office send,
When other minds remote, at self-same time,
May by conception call far different things?
When in our dreams the airy troops advance
With measured step, and move their pliant limbs
Alternate, and to mental sight their feet
In measured cadence fall, what must we think?

Are these light phantoms skilled by Nature's art,
 Such nightly pomps to show, or comes it not
 That as in speech the modulated tones
 By myriads lie hid, yet seized by mind;
 So myriad phantoms—furniture of mind,
 A visionary world—is all around,
 And ever ready, everywhere prepared
 To deck our mental world with imagery!
 So great their number, and so swift they glide,
 So airy, too, that mind cannot perceive
 But by a close regard—they fade and die,
 But that the mind them gathers to itself,
 Sees what it will, and makes what it perceives.
 For see you not the eye prepare itself
 To see a thing minute? That e'en the near
 Were as a thing remote, unless the mind
 Attend. What wonder, then, that it should lose
 The throng of phantoms round, attending not!
 Then from small signs we largest inference draw,
 And, self-deluding, on ourselves impose.

Sometimes fit image fails to be supplied,
 And visions change their features and their age:
 What was a woman straight becomes a man;
 The fair the foul, with shifting forms, nor rouse
 Our wonder, sunk in deep, oblivious sleep.

824-858 Here guard against the folly to believe

495't. That the bright light of glancing eyes were made
final cause

To see, feet knit to tapering legs to walk,
 Or jointed arms to the broad shoulders hung,
 On either side with ministering hands,
 Were given us to serve the wants of life.
 This to suppose preposterous were and would
 Invert the order of effect and cause ;
 For members were not formed in us for use,
 But, being formed, made for themselves a use ;
 Nor was there vision before eyes were made,
 Nor speech before the tongue ; but eyes and tongue
 Came first in order,—as the hearing ear
 Had in creation precedence of sounds—
 Thus all the members *were* before their use ;
 Hence, not for that grew they to what they are.
 Far different 'tis with things contrived for use.
 With hands and nails fierce fights were waged, and
 limbs
 Were torn, faces with blood defiled, long ere
 The winged arrows flew, or gleamed the spear ;
 Prompt Nature taught how to avoid the blow,
 Long, long before art gave protecting shield.
 The weary body to commit to rest
 Was earlier than the spread of downy beds,
 And thirst assuage before the use of cups.
 'Tis easy to believe that things contrived
 To minister to purposes of life
 Were for their use contrived ; but different far
 With limbs and organs, for they first were made,
 And after came the notion of their use.

Preceding thus, absurd it were to hold
That they for *that* created must be deemed.

It little need surprise that living things
Seek natural food, by appetite impelled,
Since atoms flow continuously from all ;
And most from animals by action roused ;
Much is expelled through perspirative pores,
Much by the breath exhaled, as languidly
They pant. All these the body sap ; whence comes
Exhaustion, and desire of food to prop
The failing limbs, exhausted strength restore,
The gnawing tooth of hunger to appease.
The liquid flow comes grateful to the lips,
For respiration and the play of life
All gather heat that lights a fire within ;
Then comes the cooling draught to cool its rage,
The feverish thirst allay, gaunt hunger fill.

And now I tell how limbs we freely move,
Direct our steps and bear our body's weight,
Where prompts the will. Attentive mark my words :
First comes an image and salutes the mind—
Hence springs the will ; for none begins to do
Aught but what mind hast first conceived and willed—
Conceived because an image first was there.
When thus the mind is roused it wills to move—
Then vital powers, through joints and limbs diffused,
Act on the body and propel the frame—

The body, too, exhilarated feels,
As the light spirits permeate its pores ;
Hence moved with twofold force of mind and will,
As moves the ship with wind-distended sails.
And wonder not such corpuscles minute
Can move the body's weight, for see the wind,
Light subtle minister, drive on the ship
With all its bulk immense, and the helm guide,
As lists the governing hand, the rushing mass.

How sleep reposeful now bedews the limbs
And smooths the wrinkled cares, I will with few
But winning words, if so my art avail,
Unfold ; for sweeter is the swan's low note
By listening heard than the intrusive cry
Of cranes importunate, by the winds dispersed.
Lend thou attentive ears, lest thou deny
My affirmations as impossible,
Unconscious that the fault is all thy own.
Sleep, then, comes on us when the vital powers
Grow weak along our limbs—in part cast out
And part subdued, benumbed, retired within.
Then fail the members, all their powers relaxed—
Nor doubt the sentient powers depend upon
The Soul, which, when by sleep o'erpowered, totters
Upon her seat—not all cast out, else would
The body sink in death's eternal chill.
Some latent soul remains concealed within,
As in the ashes lies the hidden spark,

Whence sense can be relighted in the limbs,
As springs again to flame the slumbering fire.

Whence and from what cause this new condition
comes,
When Soul grows faint, and languishes the frame,
I fain would tell—cast not my words to winds—
First, then, all animals perforce must have
Their outward frame girt by encasing air,
Thus beat by many a blow ; hence all have their
Protective teguments of hairy skin,
Of filmed feathers, or of mailing shell.
While the breathed air, as it flows in or out,
Their parts interior abrading sweeps ;
By both, the body hurtled, thus and drubbed,
Come last the blows that, penetrant through pores,
Reach in their inner seats to primal seeds—
Then spreads a kind of ruin through the limbs,
Disrupting vital ties, whereby the soul
In part cast out, part yields subdued within ;
Or wanders through the limbs, nor can unite
In natural functions, offices of life.
Then fails the sense, inverted vital powers,
Weak grows the body, languid every limb,
Down drop the arms, knees bend, and eyelids droop,
And the lapsed body sinks o'erpowered to earth.
So heavy slumber on repletion comes,
Or body worn with toil—for food o'erloads
The ducts, and labor wears the frame—that more

The assailed soul then quits her citadel;
Or, severed and dispersed, labors within.

What occupies the mind, on what it most
Delighted dwells, in dreams will reappear,
And nightly visions reënact the day:
Lawyers plead causes and interpret laws;
Soldiers new battles fight, and range their fields;
With warring winds sailors rude contests wage;
While I, the worshipper of Nature, in
My country's language seek her truths to clothe.
Thus come illusions of our loved employ
In dreams, and haunt the chambers of the mind.
So those who day by day attentive dwell
Upon theatric shows; when now the scene
No longer meets the sight, open remain
The mental avenues, and phantoms throng
A shadowy world along accustomed ways;
E'en as awake they dancers seem to see
In timely measures move their floating limbs,
While liquid sound of harp and speaking strings
Ring in their ears; the gathered throng they see,
With all the splendors of the painted scene—
So vividly is stamped what occupies
Our waking pleasures and our day's employ;
Not in men only, but as well in brutes:
The gallant courser oft in sleep we see,
Profuse of sweat, draw quick his breath, as if,
Forth darting at the barrier's drop,

He would with stiffened sinews for the palm contend—
The hunter-dog, in sleep unquiet wrapped,
Twitches his limbs and utters smothered cries ;
With eager nostrils snuffs the frequent air,
Or starting follows in a quick pursuit
The phantom of a deer his fancy sees
In flight—too soon, alas ! awake, the fond
Illusion fades, reality returns—
The faithful watch-dog see light slumbers chase,
Quick from the earth snatch his reclining limbs,
At fancied sight of stranger form suspect
Within the limits of his guarded realm—
The subject birds seek with a sudden wing
The dark recesses of the sacred grove,
If, in light-lidded slumber, fancy sees
The slaughter-bearing eagle or the hawk,
Though distant, steer toward them his dreaded flight.

The minds of men, who under impulse high
Great deeds perform, repeat the same in sleep—
Kings play their game of war, are captive led,
Or, mingled in the fight, shout as they see
Close at their throat the shadow of a knife ;
While many struggle with imagined foes,
And fright the night with groans wrung out by fear ;
Or utter cries as writhing in the jaws
Of the fell lion or the savage bear.
Many, in sleep, from overcharged breast
Dark mutterings utter, and o'erruled become

Unconscious witnesses of hidden crime—
While many suffer all the pangs of death,
As headlong hurled from lofty precipice,
Precipitate to earth with crushing fall;
And frightened start, snatched by the mind from
 sleep,
Scarce to themselves return, so shook their frames
By the fierce tide of apprehensive thought—
Another thirsting sits, or seems to sit,
Near flowery slope of gently flowing stream,
Or fountain's fringed bank, while fancy infinite
Drinks in a river with insatiate lips.

When downy youth, attained its flowery prime,
By circling years to adolescence comes;
New currents flow tumultuous in the veins,
New ardor glows, unwonted visions come,
Clothed in new forms of loveliness and grace—
Love-dyed, presaging joy to raptured eyes,
Revealing regions of undreamt-of bliss.
And chief in dreams the phantoms thronging come,
Fit mates to his desire, decked in allures,
And call his being forth; stung with desire,
How, love impelled, then rushes he to grasp
The airy foe, whence comes the rapturous wound;
In fair encounter joined, maddened, seeks in
His foe relief, till run the wild career,
He sinks exhausted in the floods of love!

Thus 'tis the youth, smit with sweet bitter darts
Of Venus and her boy, from yielding form
Of budding woman in her flowery prime,
That moving showers at every gesture love,
And fills the breathed air with soft desires,
Thus 'tis the youth, infect with Venus's darts,
Forth launched from such love-dyed, subduing forms,
Conquered, submiss, o'erpowered, possessed, borne on
By such tumultuous tide, yields all his soul
To melt his being in a fond embrace.

This, then, is Venus, this the name of love,
That to the heart distils the honey drops
Of soft emotions and of fond desires ;
Soon to be followed by corroding cares.
Is loved one absent, straight her image comes,
And her dear name rings constant in his ears ;
The path she trod is left perfumed with love,
And all the universe takes from her its hue.
But fly these visions of an amorous soul ;
Turn from such food of love, divert the mind
To other objects of an equal care,
Nor be a slave to one, nursing fond thoughts,
But nursing surer care and bitter griefs
That come attendant on uncurbed desires.
The mining ulcer lives by being fed,
Strikes deep its roots within heart's secret folds ;
And day by day more heavy grows the load,
If the affections be not turned aside

To newer proof, the soul unlimed be turned
To other object of a like desire.

Nor lacketh he the pure and sacred joys
Of love, the chaste, who, tempered and restrained,
Accepts its pleasures, but escapes its pains.
The mad voluptuary fails of what he seeks ;
E'en in the moment of a love possessed,
Wild wander vague desires, uncertain what
His heart requires, bewildered and oppressed,
He tearing kisses, wounds the lip he loves—
Deep diving for a joy that is not pure
And goaded by insatiable desire,
That stains the rapture of voluptuous cup.
For e'en enjoyment cannot quench his rage ;
The more possessed more ardent burns desire,
The airy phantom mocks the grasp, and his
Elusive hope evanishes in air.
Thinking to quench the flame by plunging in
Its source ; which ne'er can be—hunger and thirst
Appeased may be, satiate by food or draught
Appropriate ; since they some substance bring
To quench desire ; but lovers feed on air,
As one who strives in dreams thirst to assuage
By visionary draughts, his thought eludes ;
And still he burns, though plunged in rushing stream.
Thus Venus mocks the lover with a shade,
Filling the soul, but vagrant to the hope ;
No art he finds to medicine his ill,
But pines uncertain with a secret bane.

Add to these, torments of a mocked desire ;
His strength consumed, he mourns his labor lost,
Holding his life beneath another's beck ;
Ingulfed his fortune in a flood of debt,
Duty neglected—reputation dead—
While bracelets rare, and gold-set gems adorn
His mistress' hand ; and the rich, silken robe
Is frayed and moistened in the sweats of lust !
The hard-earned patrimony of a careful sire,
Turned to rich vestments and to gaudy shows,
To cups and garland'd feasts, soon melts away,
In ministrations to a whore's caprice.
But all in vain to find the joy he seeks.
E'en from amid the fountain of delights,
A bitter comes that stings in midst of flowers—
His stricken soul is gnawed by sharp remorse
At passing slothful hours, his youth consumed ;
Or doubtful word by his frail mistress dropped
Pierces his heart, and burns like secret fire ;
Hate gendering jealousy comes in place of love ;
Deeming his charmer is not all his own,
As casting wand'ring eyes, or, sudden turned,
Sees in her face trace of inviting smile.

If such the miseries of rewarded love,
Unnumbered more wait on rejected suit,
Open and known to all—then guard betimes
Your feet from slippery paths, lest, ta'en in snare,
Your youth should point the moral of my strain.

'Tis not so hard to shun the nets of love,
As, taken in her toils, the knot to loose.
Yet the entangled may escape unharmed ;
Unless they stand a gaoler to themselves,
And shut their eyes to all their fair's defects.
This men will do, blinded by mad desire,
And e'en their faults convert to virtues rare,
Adorning them with every fancied grace ;—
And thus the ugly and depraved we see
Flattered and prized by men like them depraved ;
While all deride and mock, they hug the chain,
Smit with a base desire, and dead to shame.
To their fond eyes *black* is a rich brunette ;
The *slattern*, bears her graces unadorned ;
Owl-eyed, Minerva is of wisdom rare ;
The *dwarf*, quintessence of all joyous charms ;
The *dry* and *sinewy*, is a light gazelle ;
The *grossly fat*, like stately Juno moves ;
The *stammerer* lisps, the *dumb*'s a modest maid ;
The *bold, loud talker*, passes for a wit ;
The *lean* and *haggard*, light for lists of love ;
The *pale* and *hectic*, is a lily drooped ;
The *flaunting bosom*, Ceres, fit for Jove ;
Thick lips, a goddess of luxurious kiss.
Thus moon-struck lovers will their chits adorn,
With more perversions than my verse can tell :—
But grant your mistress fair ; that as she moves
The Cyprian goddess breathes from every limb ;
There 're are others just as fair ; and without her

You happily have lived in all the past.
She mortal is with frailties endowed,
And suffers Nature's laws, that oft excite
In her attendants the derisive sneer.

The starved lover at the door denied,
With flowers and garlands decks the portals proud ;
And sick at heart, plants kisses on the sill,
Or o'er the threshold pours the rich perfume—
When, if admitted, no perfume would greet
The sense ; but airs that breathe, not odors, sooth,
Would counsel quick retreat ; his low love plaint,
Long studied with set care, unsaid, he now
In other tone his folly loud proclaims ;
In fancying his mistress all divine,
And not a mortal with a mortal's lot.
This know full well the nymphs—and careful hide
From lovers' eyes the curtained scenes of life,
When they would hold them in their amorous toils.
But let them shun the light, adepts in art ;
Fancy can all portray, and thought can drag
To light and truth what cunning wiles would hide ;
E'en they themselves, if open and sincere,
Will scorn to deal in such thin veiled deceits—
To others granting what themselves they claim,
Will yield to what humanity inflicts.

But let me not gainsay the mysteries
Of love allowed, nor Nature's law deny,

That plants her increase in the lap of joy.
Full oft the woman breathes no feigned flame,
In close embrace to manly feature joined,
With lips bedewed, tears kisses by the roots,
Or languishes o'erpowered with melting joys;—
Not quite all soul—associate pleasures seek,
To bless her lover bent, be blessed therein.
Allured by pleasure thus, all beasts and birds,
Each in its kind, submit them to their mates;
By mutual joys and mutual pleasures thus,
All taken in the snare, and captive led
By Nature's rite, due plant the coming race.

Which sex in love's embrace gives most of love,
Will on the offspring stamp its likeness most;
And mingled features of the parents show,
When both with equal love in love conspire.
While oft comes back, moulded in finer clay,
New stamped with life, the voices, features, air,
Of ancestors remote, uniting thus
The rising generation with the past.

No god makes barren e'er the marriage bed,
Nor child denies to lisp a father's name;
As some suppose, who mournful altars stain
With victim blood, and heap the shrines with gifts,
To make their wives prolific from their loins.
Vain they fatigue the gods, besiege the fates,
With idle vows and prayers, a crown to grant

Of boys and girls, a bulwark round their age.
They ne'er can know parental joys, nor see
The womb enriched with the sweet living growth ;—
Their union wants fitness of things required ;
To usher in new life from lives conjoined,
Must need a harmony toned by Nature's hand.
Ill-matched, diverse in humors, or in kind,
Can never join in love, that to the height
Ascends productive ; for such crown requires
Harmonious influences, and communion sweet.
In other unions, if so fate permit,
They may, though late, such consummation find.

But not in the tumultuous joys are placed,
The enduring pleasures of a life of love.
Without the aid of Venus or her boy,
Without the aid of any amorous charms,
Woman, by gentle arts, by manners kind,
By scrupulous neatness, and complaisant acts,
Though poor in form, can make herself beloved,
And knit her husband to her during life.
It little needs ; habit will grow to love,
If not perverted to the monster hate.
Renewed appliances in time prevail,
However light their blows, and conquest gain,
As rocks are hollowed by the falling drops.

BOOK V.

ORIGIN OF THE WORLD—PROGRESS OF SOCIETY.

Praise of Epicurus.—World not Eternal—Not Created by Gods for the Use of Man.—The World had a Beginning and must have an End.—War of Elements.—How the World was formed.—Of the Heavenly Bodies — Their Motions — Magnitudes.—Celestial Phenomena.—Causes of Day and Night.—Phases of the Moon.—Procession of the Seasons.—Eclipses.—Production of Plants—Animals and Man.—Rudeness of Early Life.—Gradual Advance of Culture.—Origin of Language.—Progress of Society.—Founding of States.—Violence.—Restraint of Laws.—Origin of Religious Rites.—Superstition.—An Unseen Power rules Human Affairs.—Of Arts.—Discovery of Metals.—Early Warfare.—Garments.—Agriculture.—Music.—Gradual Advance of Society.

BOOK V.

WHO can with ardent genius build a song
Fit for the majesty of things to us revealed?
Who can with words avail, who praises sound
Equal to his desert, who hath bequeathed
Such rich rewards to men by genius earned?
No one, I deem, with mortal frame endowed.
Duly to raise the flowing strain to suit
The acknowledged grandeur of the mighty theme,
A god—surely a god, illustrious Memmius 'twas
Who first to man unveiled the rule of life
That we call Wisdom, and the guide supplied
From such rude buffetings of a stormy sea,
From darkness so profound to rescue life,
And it to haven bring in tranquil seats,
Bathing its course in such effulgent light.
Compare with this the other gifts divine,
In ancient times conferred; of Ceres, corn;
Bacchus, the fruit of the heart-cheering vine;
How weak and poor their guise; since, without them,
Life might drag on, as now some races live.
But without wisdom, none can life enjoy.
Wherefore the more a god he should be deemed

Who man with richest gifts endowed, and gave
That solace sweet of life to cheer the soul.
Think you, perchance, the Herculean feats excel
This rich endowment, you would greatly err.
What harm could come to us from horrid jaws
Of Nemean lion, or Arcadian bear?
From Cretan bull, or Lernean hydra, dire
With hissing serpents, or the dreaded power
Of the three-headed monster, Geryon called?
From Diomedes' horses snorting fire,
On the Bistonian shores or heights of Ismarus?
Or can the birds of fearful wing, that haunt
Stymphalian marshes, reach to do us harm?
Or dragon fierce, serpent of form immense,
That guards Hesperian apples—fruit of gold,
On the Atlantic shores; the melancholy main
That not barbarians dare to venture near!
Monsters like these by Hercules destroyed,
If living yet, what could they do to us?
Since equal monsters swarm throughout the earth,
And hills, and woods with fearful sights are filled,
That harm us not, since we their haunts avoid.
But to the breast unpurged, what perils, and
What strife in all despite arise! What cares,
What anxious wishes, and what gnawing fears
Corrode the heart! What ravages from pride,
From squalor, lust, from luxury, from sloth!
And shall not he who fiends like these subdues,
And from the breast expels by words, not arms,

Be ranked with the gods? And all the more
Since he gave utt'rance divine about the gods,
And Nature's frame and mysteries revealed.

His footsteps following, I his theme pursue,
And teach in verse, if so my art avail,
What the conditions with which all are formed;
How, bound in their necessity, they are
Powerless to break the binding laws of time;
And, since the nature of the Soul is proved,
Formed of a body that has birth and growth,
Nor can unscathed through ages long endure;
That when the dead seem on our sight to rise,
'Tis phantoms only that deceive the mind,—
What now remains but in due form to show,
That the great globe beginning took in time,
And bears a mortal frame; tell how it rose,
How atoms by concurrence the foundations laid
Of earth and heavens, the sea, the stars, the sun;
Tell of all living things that dwell on earth,
Of fabled ones that dwell but in our dreams;
How the first men in various tongues began
Converse to hold by giving names to things;
How fear of gods crept into human hearts,
And in all lands hath consecrated groves,
Temples, and fanes, statues, and altars high;
And next to tell of sun and wandering moon,
How Nature ruling guides their orbs with power,

And shapes their course, lest you perchance should
think

Spontaneously they move 'twixt heaven and earth,
Obsequious in their perennial course,
Nurture to yield to animals and plants;
Much less should think them wheeled by the gods.
E'en those who well have learnt the gods dwell in
Repose, if not the less with stupid wonder they
Scan Nature's fabric, seek how all is done
Above our heads in the ethereal courts,
Will soon be bound in Superstition's chain,
Invoking lords severe whom miserably
They deem all-powerful and supreme,—untaught
What can exist, what not—the laws by which
Each has its powers defined by bounds profoundly
fixed.

No longer I with promises delay.
Memmius! behold the sea, the earth, the heavens,
Their triple nature, triple form diverse!
Though all unlike their structures, still they shall
Be all alike in one destruction whelmed!
E'en the great globe and fabric of the world,
In harmony upheld through countless years,
In one dread day shall crumble and dissolve;—
Though well I wot the announcement seemeth strange,
And hard by words alone to win belief;
As of a thing that bears no ocular proof,
Nor can subject be made to sense—surest

And straightest way to reach the minds of men—
Yet will I speak; the dire event may give
Faith to my words, perchance, and you may see
The steadfast earth to tremble as with throes!
Which far may ruling Fortune ward from us,
And reason, not the dread event, convince
That all may sink, in dire destruction whelmed.

Before I further may reveal these fates,
More sure than oracles of the Pythian god,
Receive the words of solace and relief;
Lest, bound in Superstition's chain, you think
The earth, the sea, the sun, the stars, themselves
Are gods endowed with an immortal frame!
For, if they were, rightly you'd deem my crime,
Equal to that of giants famed of old,
Who sought the heavens to scale. Equal to theirs
His crime of pride, whose reasoning seeks to shake,
The sure foundations of the steadfast world,
And blot from heaven the all-resplendent sun,
Calling immortals by a mortal name!
But now so far their natures from divine,
So little worthy to be ranked with gods,
That they fit instance give of the devoid
Of vital functions; for we can't believe,
Sense and intelligence can all forms invest;
As trees not rooted are in air; as clouds
Float not in seas, nor fishes live on land;
As flows no blood in stocks, no sap in stones;

Since all exist by necessary laws ;
Laws fixed determining where each can exist ;
And thus the Soul can't without body rise,
Nor can from nerves and blood estranged be ;
For, if it could, in some part of our frame,
In head, or foot, or hand, it would be found,
And where created there would constant be.
But now we know the Soul invests entire
The frame corporeal—therein lives and grows.
How then believe it can exist divorced
From animated form—in earth or fire,
In water or in air? How less believe
Such things as those can be endowed as gods,
Since not with least vitality endowed ?

Nor can we more believe the sacred seats
Of the immortal gods are on the earth ;
Their natures so refined, removed from sphere
Of sense so far, and scarcely seized by mind—
All touch of hands, eluding, and perforce
Incapable to touch the tangible ;
For what can't touch cannot itself be touched.
Thus all unlike to earth the blest abodes,
As unlike earth the nature of the gods ;
Which after argument shall more clear unfold.

To say, moreover, that the frame sublime
Of nature was upbuilt for man ; that praise
Is due to gods for work well deemed divine ;

Founded by ancient wisdom, and sustained,
A dower immortal for the sons of men—
That impious 'tis such fancies to gainsay,
With daring words their overthrow proclaim ;
Such facts to feign, such inference to draw,
Devising systems vain, is folly's brood.
What can the blessed and immortal gods
Advantage gain from gratitude of man ;
That for his sake they glorious works perform ?
What could arouse them in their age of bliss,
Or what compel precedent life to change ?
They joy in change whom present things annoy ;
But those to whom no want or wish can come,
How could the love of novelty excite ?
Or must we think all life in darkness lay,
And gloom, till birth of things ; till burst of light
Came on creation at Earth's natal day ?
But what the harm if we had ne'er been born ?
The love of life the living may impel,
By promised joys, life while they may to clutch ;
But unto him who ne'er hath tasted life,
Of what import that he was never born ;
Or how grieve he, debarred he knows not what ?
Where was the exemplar for created things ?
Where the ideal man present to gods'
Conception, shadowing forth existence new,
As thing desired and for creation fit ?
How could the power of elements be known,
And what their varying orders could effect,

Had not great Nature, at a random stroke
 Gave specimen, and showed what could be?
 Nor wondrous this, that atoms infinite,
 By shocks innumerable, through unending time,
 And endless impulse, wrought on and vexed,
 In every mode excited to cohere,
 All possible assemblages essayed,
 Should fall at last to order and a plan;
 And thus the fabric of the world be hit,
 Creation's form disclosed, order began,
 And still maintained by innate plastic power.

And though I ignorant were of elements,
 Or how their working could give birth to things,
 Yet this I dare affirm, from reasons drawn
 From heavens above and human things below:
 Nature was not divinely formed for us,
 So full of imperfections and defects!
 For see, of all the cope of heaven beneath,
 Mountains and haunts of beasts great part possess;
 Vast rocks, and marshes, waste, and ocean's main,
 Wide-stretched 'twixt narrow lands; while parching
 heat
 And frost eternal bars two parts from man.
 Of what remains, Nature's spontaneous powers
 Would soon with brambles overspread, didn't man,
 With spade and sock incessant plied, and sweat of
 brow,
 For sheer subsistence her wild strength subdue.

And groaned he not beneath the ponderous plough,
To break with iron share the stubborn glebe ;
No fertile field would wave, no plant would raise
Its tender stem corn-bearing to the light.

And now, when oft, by labor huge hard earned,
They lift their foodful heads, and blooms the earth,
The untempered sun scorches with ardent rays,
Or floods o'erwhelm, or nips the searing frost
Their leafy honors, or the tempest rends.

Again, why rears and ripens Nature savage beasts,
Dread enemies to man? Why comes each change
Of season laden with disease? Why death
Untimely stalk where life has just begun?

See too the child Nature by cruel throes
Projects from the maternal womb—
Naked and void of speech, like shipwrecked sailor
thrown

By savage waves upon a hostile shore ;
In want of every aid the thin-drawn thread
Of life to save, upon the ground it lies ;
Its feeble breath, a faint but sole resource,
Fills all the place around with mournful cries,
As well it may, presaging what's to come,
Thus thrust upon life's heritage of ill !
To such faint dawnings of uncertain life
Compared, how vigorous spring the young of beasts !
No need to them the cradle's lull ; the soft
Lisp'd words of nurse to soothe their early ills !

They seek no garments 'gainst the roughened air ;
No need to them of arms or bastioned walls
For guard ; Dædalian Earth for them all things,
And Nature boon, in amplest store supplies.

Now, to resume my theme ; since we have seen
Earth, water, fire, and the light breath of air,
Composing the great universe of things,
Made up of bodies that are born and die ;
Such we must hold the nature of the world ;
For well we know when injury can assail
The parts, the whole is to destruction doomed ;
And, seeing the wide universe's limbs
Made up of parts now lapsing, now restored,
We well may know to Heavens and to Earth,
As came their natal, must their dying day
In due succession come,—as born must die.

And deem it not assumption to assert
That fire and earth, that water and the air
Can sink as perished, and rise reproduced ;
For see you not parts of the Earth scorched by
The sun's perpetual rays, to powder ground
By passing feet, in clouds of dust arise ;
That through the air prevailing winds disperse ?
Parts of the solid glebe are swept away
By inundating rains ; by rains rivers
Rapacious made mine and corrode their banks—
Besides, what feeds another must itself be fed,

And wasting here recuperate elsewhere.
And thus the universal parent, Earth,
Is of all things the universal tomb.

That seas, fountains, and streams are ever fed
With a perpetual flow of liquid stores,
What need of proof? The mighty rush unchecked
Of waters down, on every side declare ;
But silent flow from surfaces forbid
The sea to overflow ; part in her waves
Winds passing dip their wings and light disperse ;
The sun ethereal with his brooding rays
Sucks up a part in vaporous clouds and mist ;
And their moist burden, wafted by the winds,
Wide waters every land with fertile showers,
Returning liquid stores to fountain heads.
Part under Earth flows in sweet secret path
With limpid foot where opening path is found—
Whence gurgling springs, in silver threads well forth.

And now I tell how the great ocean, Air,
Suffers incessant change ; for all that flows
From things her gulf receives, and this again
To them restores—renewing wasted things ;
Else all ere this had been convert to Air.
And since the Great Whole is in continual flow,
Air, fed from all, to all in turn restores.

Fountain of light, the sun's ethereal stream

Irradiates heaven with fresh dazzling floods,
In ceaseless flow continuously renewed ;
For where the gleaming splendor falls—it dies.
As when thick clouds steal o'er his lucent orb
The ardent rays are quenched, the gleam below
Is lost, where'er the veiling cloud is borne.
Thus perishes the light as fast as sowed.
Nor could the Sun illuminate the Earth,
But that his fount supplies perpetual streams.
Thus, too, terrestrial lights—our nightly lamps,
The hanging lustre, and the beaming torch
Bituminous, by burning ministry
Supply new light, still flowing, still renewed.
The tremulous rays no intermission know ;
But the bright ardor, hasting from its fires,
Brings quick destruction to the flaming fount.
So, too, regard the sun, the moon, the stars,
Dispensing light, by birth continuous,
And losing something ever as they shine,
Cannot inviolable being boast.

And see we not the rocks subdued by age
Crumble and waste, the lofty towers decay,
The sacred temples gape in chinks, and fall ;
Nor can their sanctity avert their fate,
Nor fight against inexorable laws.
The monuments of the dead yield like the rest
To gradual decay ; or, worn with age,
Drop into ruin with a quick o'erthrow ;

The rocks from mountain heights come riven down ;
Nor can endure unscathed assaulting age ;
But like the rest, yield to resistless laws
Of time, that limits all ; nor would they thus
Come down shattered and rent, had they endured
Scathless and free, through long eternity,
The gnawing tooth—the mining fret of time.

See the great cope of Heaven spread above,
The broad Earth holding in a wide embrace—
Which, as some tell, produces all, and them
When dead receives,—itself must mortal be ;
For know—what feeds another must in feeding waste,
And what is fed must from that wasting grow.

—Again, if Heaven and Earth eternal were,
Nor knew creation's day, why then before
The Theban wars and fall of Troy were not
Other events by other poets sung ?
How in oblivion sunk so many deeds
Of mighty men by poets unrenowned,
Nor flourished, grafted in the rolls of fame ?
Truly, I think the world began to-day,
Nor took its birth in ages far remote !
Since 'tis but now that many arts begin
To rise and flourish in their perfect prime ;
But now new wings doth Navigation take,
And Music wake to new melodious strains ;
And this Philosophy of Nature is

But now unveiled, and I among the first
To clothe its accents in our country's tongue!
Think you, perchance, things were of old as now?
That former races—denizens of Earth—
Have perished all, in floods of fire consumed?
That cities vast have sunk, the world convulsed!
Or floods of rain on rain, incessant poured,
Have sent rapacious rivers through the Earth,
That fathom deep have buried walled towns?
So much the rather, then, believe the Fates
Portend destruction to the Earth that is.
For when all things by such assaults are tried,
When some more rude assails, they needs must sink
In ruins vast, and wide destruction spread.
By inference like alone we mortal know
Ourselves among the mortal placed, struck with
The same disease as those we daily see,
By Nature summoned from the shores of life!

Besides, whatever is eternal needs must be
Of solid body to resist all blows,
Nor penetration suffer, to dissolve
Its parts well-knit—like atoms, as I've showed;
Or like the Void eternal, since it is
Exempt from blows—as all impalpable;
Or like the Great Whole, eternal, since there is
No outward place where it may leap apart;
And naught without to deal destructive blows.
But since the world not solid is, nor void,

Nor lacks infinity of outward foes,
Which, rushing might o'erwhelm ; nor lacks there
place,—

The waste, drear womb of night, its ruins vast
To swallow and ingulf,—sure, for the Earth,
The Sun, the Sea, wide yawn the gates of death !
Hence, needs confess, the World beginning had,
Nor could the mortal, for an endless age
Despise the assaults of all-consuming time.

Again, since elements wage eternal war,
Some term must to the long-fought contest come ;
When Fire would triumph over Water shrunk,
As still it strives to do, but strives in vain.
The abounding rivers pour such ample floods
As if to ingulf the world in one wide sea.
Winds, mist dispersing, curb the water floods,
And brooding rays of the exulting sun
Bridle the rage of the usurping sea ;
And sooner thinks to parch the Earth with drought,
Than that the ocean shall o'ertop her bounds,
Or spread beyond her limitary shores.
Thus these great champions with balanced power,
And breathing war, strive for the mastery,
Contending for the Universe at stake !
And, once they say, Fire reigned supreme on Earth ;
And Water once prevailed ; when high above
The topmost hills the wasting deluge came.
Fire triumphed once ; and burnt the fields adust

When the ungoverned coursers of the sun
Whirled Phaeton devious through the plains of air,
Threatening with fiery deluge all the lands ;
Had not the omnipotent Father, in his wrath,
With sudden bolt struck from the flaming car
Presumptuous charioteer, and turned the steeds
From Earth ; o'er the late nodding World again
Hung up the Sun's eternal lamp ; again
Reyoked the trembling steeds, and guiding in
Their path ordained, order restored to all.
As the old Grecian poets sung—fabling—
But under fable shadowing truth, perchance.

Fire might prevail, were all its elements
Assembled from the deep ; but prisoned there,
Hemmed in by other powers, it knows restraint ;
Else, long ere this, the raging element
Had in a fiery furnace all consumed,
And made the Universe a funeral pile !
The Waters gathering once took head o'er all,
As sure traditions of the nations tell,
And buried cities,—till opposing powers,
Sealing the fountains of the watery deep,
Shut up the sluices, and the tides withdrew,—
And, rains restrained, the rivers gentler flowed.

And now I tell how mass of matter wrought,
To found the Earth, the heavens, and the sea,
The sun, and moon, and gave them paths on high.

For sure, not by design the elements
Took order, marshalled by sagacious mind,
That preordained what motions each should have.
But atoms infinite for unmeasured time,
Wrought on and vexed by impulses and weight,
In every mode excited to cohere,
All possible assemblages essayed,
And every motion, combination tried,
They fell at length on those that could endure—
Thus rose the first faint outlines of the world,
The earth and sea, the heavens and living tribes—
Beginnings rude—for then was nowhere seen
The chariot of the sun rolling on high ;
Nor the great orbs of heaven ; nor land, nor sea,
Nor aught like things of time—our present frame.
Unwonted tempest then on chaos wrought,
And Discord ruling, atoms battle joined,
Of acts, collisions, weights, affinities,
From forms dissimilar, and discordant powers—
Turmoil from whence no unions permanent
Could come of seeds, nor they in movements join
Harmonious. Soon order empire claimed.
Parts to fit places fly—like joined to like.
Great Nature's members outline took, and place,
And gradual thus the Universe disclosed.
Then soon the Heavens disparted were from Earth ;
The girded Sea was gathered to its place,
And high o'er all the robe of Ether thrown.

First earthy atoms, heavy and involved,
Cohered, and in capacious womb prepared,
Took lowest seat; the more compressed, the more
Exuded thence light elements and round,
That rising formed the sun, the moon, the stars,
And all the exulting furniture of heaven.
Thus the sign-bearing Ether, welling forth
From crude consistence of the leaden earth,
Light bore above, and decked itself with stars;
As oft we see, when matinal light of day
Pours golden blushes o'er the jewelled grass,
Lakes and the running streams vapors exhale
And Earth sends up a mist that, rising, is
Condensed, and clothes the firmament with clouds;
And thus the light-diffusive Ether rose,
Concreted form—that round, o'er-arching spread,
And girded all things in a wide embrace.
Then, in due order, rose the sun and moon,
And wheeled their orbs 'twixt heaven and Earth
sublime
In the mid air; of atoms, they composed,
Which neither Earth could claim, nor Ether vast;
Not heavy so to sink, nor light to glide
With silent foot through Ether's brighter plains,
But between both as living bodies move,
And parts co-ordinant of the mighty Whole.

These lighter parts withdrawn, sudden the Earth
Sank in vast hollows—into gulfs profound—
Bed of the briny sea, where ocean spreads

Wide his cerulean plains ; and, day by day,
The more the earth, swept by the incumbent tide
Of Ether, and the sun's compressing rays,
Compacted to a mass, to centre settled ;
The more the briny sweat forth exudant,
Swelled with its flow the ocean's liquid stores ;
While heat and air escaping from the gross
Rose light, and high 'bove Earth, concreting spread
The lofty, radiant temples of the sky ;
Down sank the vales, the lofty mountains rose,
Their rocky ribs resisting, till their tops
Stood up in peaks, wide looking o'er the plains.

Thus founded was the Earth—a solid core,
Stable by weight ; the grosser parts sunk down
Like lees, subsiding to their place below.
Thus sea, and air, and Ether-bearing fires
Rose pure and liquid all, but lighter some.
Lightest and purest, Ether bears itself
Above the aërial tides ; nor mingles its
Pure essence with the gusty breath of air ;
But leaves it far below with whirlwinds vexed,
Made foul with tempests ; while all pure above
Gliding, it bears in tranquil course, the stars
Still onward with an eventide, and, like
The Pontic sea, knows no retiring ebb.

And now to tell the motion of the stars ;
Whether the orb of heaven itself be turned,

Pressed on both sides by air—pressed and compelled
By fierce, opposing currents, that while one
Bears on in ceaseless course the eternal fires,
With radiant ministry, another opposite,
Sticking beneath, may roll the sphere obverse,
As running rivers turn hydraulic wheels.
Whether, again, the firmament be fixed,
And yet the lucent orbs be onward borne
In rapid vortices of ether caught,
That ever rolling bears the stars along,
Or from afar, with rushing tide, impels ;
Or, whether yet, instinctive they can glide
Where'er ethereal food invites their way,
Feeding through azure fields their radiant spheres !
Which in this orb prevails, 'twere hard to tell !
I aim to teach the probable—or what
May haply rule somewhere in varied worlds ;
Not what is sure, admitting no appeal.
Of many causes possible alike,
One must prevail, and varied motions give
To all the gliding signs ; but which of all
Rules in our narrow sphere, who cautious treads,
With groping hands, seeks doubtful for the truth,
Will not assume decisive to declare.

That Earth in centre of the Universe
May fixed rest, befits it weight below,
Must fail, decreasing, and another Nature take—
From earliest age, Earth's lower parts adapt,

Joined and reposing on the yielding air,
There seated rests, nor loads it with her weight.
As limbs are not a burden to the man,
Nor heavy weighs the head upon the neck,
Nor feel the feet, the body, as a load,
But what is foreign though much less in weight,
Oppresses and offends ; so much imports
Accustomed functions, and accordant powers ;
For sure the earth was not on sudden brought
To foreign shore, cast on an alien sea ;
But part in first conception of the Whole,
At early origin co-ordinate rose
Part of the Whole, as limbs are of the man.
And thus the earth shakes with the thunder-stroke
Which would not be unless 'twere closely bound
To the aërial dome ; formed not apart,
But in creation's earliest dawn both sprung
From common cause, and so harmonious joined,
As airy soul to heavy body joined
Gives bounding motion and controls the whole,
So the dull earth joined to the subtle air,
From its light essence life and vigor takes.

No greater is the sun, nor less its orb
Than to the sight appears. For how'er far
Fires gleaming dart their light, or breathe their heat,
The distance little flame or size impairs
Or minishes their semblance ; thus the sun,
That prodigally showers both light and heat,

In shape and size must be what it appears :—
Whether pale, looking from her seat, the moon
Shines with her own, or with a borrowed light,
No greater is it than to sight appears ;
For all that far removed, through air is seen,
Ere they lose size, confused and blurred appear
In shape and outline ; while the lustrous moon
Shows a sharp limit, and clear boundary line ;
Hence, how great 'tis ! so great it looks on high.
And as terrestrial lights when burning clear,
Their brilliancy is seen, little change size
By nearness or remoteness ; so the stars,
Celestial lights, by inference just conclude
Are little less or greater than appear.

And little wonder need it now excite,
How sun so small can light so great emit !
Baptizing sea and land in radiant floods,
The wide world deluging with ardent heat,
And lustrous beams ; since it may be, perchance,
The sun the sole o'erflowing fountain is
Whence light and heat well forth ; that to its orb
All luminous and igneous atoms flow,
And from that fountain-head pour forth their streams.
For see you not how a small gushing spring
With moist redundance waters wide the mead !
Or it may be the sun, celestial spark,
Diminutive, circumfluous air may fire.
If air there be lying exposed, and fit

The burning ardor to receive, and spread ;
As from a spark oft stubble-fields take fire,
And wide around the conflagration spread.
Or yet, perchance, the sun, bright roseate lamp,
Holds secret stores of hidden fire around
His fulgent head, that darksome lie, but fraught
With heat add ardor to his glancing rays.

Nor is it clear by what unvarying law
The sun from burning regions of the Goat
Averted, sweeps his wintry course, and then
Turns to the Crab's solstitial goal again!
Or why the moon, in monthly course surveys
The regions traversed by the annual sun.
Who the sure cause of such perplexity
Will venture to assert? 'mongst many take
The well-weighed thought of Democritus sage ;
That nearer as the orbs their courses wheel,
So much the less they 're onward borne above,
By the celestial sphere; the lower still
Less rapid borne than are the upper orbs.
The stars thus leave the lower orbs behind,
As placed so much beneath the radiant signs ;
And chief the moon, clipt in a lower sphere,
Borne in gyrations of a languid power,
So much the less can hold her pace with stars ;
That, gliding swift, her tardy form o'ertake,
And pass beyond again to overtake,
And thus to her apparent swiftness lend.

Or it may be the air from parts transverse,
Alternate flowing at appointed times,
Shoulders the sun from the solstitial signs,
To wintry regions; and reverted thence,
Turns it from regions of the northern frore
To fervid heats of the distempered south.
So may the moon and stars, revolving in
Great orbits of great years, by airs diverse,
Alternate pass to quarters opposite.
For see you not the trailing clouds above,
Borne in an adverse tide to clouds below,
By gusty currents of opponent winds?
Then why should not great Ether's greater tides,
With diverse currents bear the gliding stars!

And now the night with darkness palls the earth—
Whether the sun accomplished long career,
Rests on the outer battlements of heaven,
And there allays his languid fires by the
Long way exhaust, swept by vast tracts of air,
Or the compulsive course impels his way
Beneath the Earth that bore his orb above;
Till in set time the goddess of the morn,
Blushing Aurora, brings through Ether's courts,
And strews her path with light; whether it be
The self-same sun returning under Earth
With his vaunt couriers paves a way in heaven,
As his fleet rays anticipate the sky,
And redden his advance; or, whether seeds

Of heat dispersed fit seasons known collect,
Engendering new lustre for a sun ;
As on the Idean mount 'tis famed they see
At early dawn, the scattered fires unite,
And thus englobed the sun's full orb complete.

Nor deem it wond'rous that seeds of heat
Can in set time unite, and thus repair
The sun's effulgence ! since in Nature much
We see at its appointed season come.
The woods put on their verdure at set time,
And at set time their full luxuriance shed.
Imperious time rules o'er the growing youth ;
At season fixed, unseats his milky teeth,
Clothes with pubescent down his tender cheek
Till, by degrees, the flowing beard descends.
Lightnings, and snow, rain, and wind-bearing clouds
Do not, capricious, at all seasons come,
But wait obedient on pre'stablished laws.
Such in their origin all causes were,
So in the dawn of Things, the Universe
Took its departure from a primal source
That Nature followed in an order fixed.

The days and nights alternate wax and wane,—
Whether the sun above—below the Earth
Careering, in unequal parts divides
The circled orbs, and taking from the one,
Gives to the other more than to it due.

Till he return to that celestial sign,
Where the year's node makes equal day and night
In his mid-course ; when equal his remove
From north and south, where his zodiacal path
With just obliquity cuts the starry sphere ;
The which, he climbing slow, walks annual through
With rays oblique, surveying earth and heaven—
As shows their apt device who map the sky,
Adorned with signs and constellations fit.
Or denser is the air in certain parts,
That under Earth the trembling radiance lags,
And to his rising comes with lingering steps ;
Weary and long, thus making winter nights,
And slow advance the ensign of the day.
Or in alternate parts, or quick or slow
The fires collect on the horizon's verge,
Accomplishing the sun for day's career.

The Moon may shine, bathed in the solar beams,
And daily more to us her luminous face
May turn, as farther from the sun, till in
The opposing heaven full-orbed she shine, and there
Her rising waits upon his setting beams ;
Thence, gradual backward turned, withdraws her light,
Nearing the sun, gliding through opposite signs—
As they conceive who make the moon a globe,
Whose circuit wheels beneath the circling sun—
Or it may be she shines with proper light,
And owes to varied cause her changeful form.

A dark attendant, waiting on her path,
May veil in varied ways her lucent orb,—
Or she herself may roll a globe half dark,
And half illumined with the lustrous light,
And, turning, changeful forms of brightness show :
Now full-orbed shining in her radiant sphere,
Now gradual waned, her regions bright withdrawn,—
As Babylonian science of the Chaldees held,
Contending 'gainst the Greek astronomy.
But why may not each maintaining be true ?
Why, boldly confident, affirm the one,
When th' other equally may reflect the truth ?
Or what forbids a new moon to arise,
Which day by day may grow ? Sure this were hard
By reasoning to disprove, when all around
So much we see in fixed procession move.
Forth comes the Spring, with Venus and her train ;
The winged Zephyrs, precursors of Spring,
Fanning her pathway come ; close on their steps
The goddess mother Flora from her hands
Sheds flowers upon their path, enriching earth
With choicest odors and resplendent dyes ;
Soon follows heat, and dusty Ceres comes,
With rustling wave of the thick-bearded corn,
And the hot breath of the Etesian gales ;
Then Autumn drops, and vine-clad Bacchus brings ;
Distempered skies succeed, and gusty blasts,
Vulturus growling hoarse, and Auster fierce,
With lightnings fraught, while Boreas brings his storms ;

Decrepid Winter soon creeps up the North,
Howling and chill, and in his train brings Ice
And Sleet and Snow and Frost with chattering teeth.
Since thus the seasons in due order move,
So much the wonder less that a new moon
May at appointed time take birth on high,
Grow full, then fade, by due degrees effaced!

The sun's eclipse, the hidings of the moon,
To many causes we may well ascribe ;
For if the moon can veil the sun, to his
Bright luminous orb opposing her opaque ;
We well may deem some body void of light
Gliding between may dark her silver orb ;
Or to the languid sun at times may fail
His fires, and then revive, escaping from
Celestial regions to his light adverse.
And why may not earth in turn despoil the moon,
Herself opposing to the oppressed sun,
While, through the long cone of the darkened shade,
She in her monthly course glides laboring on ?
Or other body dark, invisible,
Coming between, may clip his profluent beams ;
Or, shining with her own, her gleam may fade,
When wandering on the shores hostile to light.

What now remains, since thus I have resolved
How all is done in the celestial plains,
And we may know what cause and power prescribes

Sun's varied course, the wanderings of the moon,
How, overcome by envious shades, they oft
In darkness unattended veil the skies,
Their bright eye closed,—how soon escaped therefrom
And unimpaired they new effulgence shed ?

Now I return to the young Earth's young prime,
When her soft bosom and prolific womb
With genial influence swelled, and she put forth
Her early offspring to the inconstant air.
First, Earth around on hill and every plain
Invested verdant robe of herbs and grass,
And flowery meadows glowed with brilliant dyes ;
The trees in rivalling growth, high-lifted heads,
With waving verdure clothed the rugged hills ;
While humbler in their shade came forth the ranks
Of herbs and shrubs and plants of every growth.
Then she created all the living tribes,
In various ways each to its place adapt ;
For animals dropped not from heaven to earth,
Nor came they forth from salt waves of the sea,
But sprung from Earth—to Earth we justly give
The name maternal, since all sprung from her,
That now innumerable swarm on hills and plains
From moisture sprung and fecundating heat ;
Hence less the wonder if more thronged they stood,
And stronger in the Earth's and Ether's prime.
First, in the spring the callow young of birds,
Their frail envelopes chipped, embark on life ;

As the shrill grasshoppers in summer time,
Their fragile tunics cast, free wander at
Their wills, food and a higher life to seek ;—
Then Earth first showed races of mortal men,
When warmth and moisture brooded o'er her plains ;
And, where each region gave propitious place,
They sprung from roots deep in her teeming womb ;
Till soon the infant embryos matured,
Escaping from the dank, sought air and light ;
The fostering Earth, her pores prolific swelled,
Poured from her veins the milky nutriment ;
Like to a woman with the womb enriched,
With the sweet burden of a life begun,
Her breasts o'erflow with the precursive milk,
Nor waits the inarticulate appeal
Of early cry more eloquent than words.
Thus Earth to her sons gave food, for garments gave
The warm and wooing air, and downy grass
In a thick fleece, supplied their couch prepared ;
For in the world's young day, no biting cold,
No ardent heat prevailed, nor raging winds ;
All things on Nature's breast together hung,
In infant weakness all together grew
By gradual increase and progression slow.

Wherefore the Earth is well maternal called,
Since she created man,—and at due time
Poured forth all beasts that range in woods and
wilds,

And all the birds that varied fan the air.
Term came at last to her prolific powers,
Like to a woman now by age effete,
Time changes all the nature of the world ;
And one condition from another flows,—
For now the earth no longer can produce
What once it could, and can what it could not—
Progressive all, none like itself remains,
The turning wheel compelleth all to turn—
As one decays and languishes with age,
Another grows and narrow limits bursts.

Then 'twas the Earth portentous monsters formed,
Or strove to form, with fearful look and limb.
Some without feet, part without hands appeared ;
Part wrapped in darkness without face or eyes,
Or body bound with close-adhering limbs ;
To dull inaction doomed, powerless to move,
To shun the harmful or to seek the good.
Many such monsters rose, portentous, vain ;
For Nature snatched from them, abhorrent, all
Increase, nor could they find food sustenent,
To reach matured age, nor join in love ;
For many things harmonious must conspire,
That propagation may prolong a race—
First genial food, then mutual charms of sex,
To knit the diverse in the joys of love.

How must have perished then unnumbered tribes

Of animals that rose to light and sunk,
Unable to transmit life to their race,
Or e'en their own ill-sorted lives to save ;—
For all we see breathing the vital air,
With wiles or strength or fleetness is endowed,
From earliest, to these their safety owe ;
While some, from their utility to man,
Remain committed to his guardian care.
The lion fierce by strength securely lives,
The fox by wiles, by his swift foot the deer ;
The faithful dog, light-slumbering and alert,
The generous steed, the patient, laboring ox,
The clustering flocks of the wool-bearing folds,
All live entrusted to man's guardian care ;
Instinctively they fly all beasts of prey,
And, just return for what to man they bring,
They find in him their providence and peace.
But those to whom harsh Nature has denied
Commending qualities rewarding care,
Nor in themselves can their protection find,
Why should they owe security to man !
Fast bound in chains of fate, exposed they lie
To all a prey, and bear a fearful life,
Till their vexed race in blank extinction drops.

But fabled Centaurs never could exist,
With double nature of a man and horse ;
Since members so diverse could never join
In acts harmonious, as well all may know ;

For see the mettled steed, attained his prime
With three revolving years, exulting bear
His strength, the while the child oft in his sleep
Solicits with faint motion of the lips
The milky fountains of his mother's breast.
But when with age the horse's rugged strength,
And well-strung limbs fail with declining years,
The stripling youth attains his flowery prime,
And clothes his tender cheek with manly down.
Then deem not Centaurs can be formed perverse,
Conjoint of man and burden-bearing horse,
Or Scylla at the waist with sea-dogs girt,
Or any such portentous forms could rise,
By monstrous joining of discordant limbs ;
That neither grow together, nor decays
Their strength, together with advance of years ;
Diverse of manners, appetites unlike,
Unfit to join in pleasure or in pain.
When flames are wont as quickly to consume
The lion's bulk as other blood or bones,
How could there e'er a triple body be—
A lion's front, the middle of a goat,
Joined to a dragon's tail—chimera dire,
Forth breathing from his jaws devouring flame.

But those who feign such animals could be
Reared in the freshness of the recent earth,
Relying on the empty name of youth,
As potent to produce what now 's not seen,

Will garrulous prate of many marvels more ;
When, as they say, golden the rivers ran
Through many a waving plain, and shrubs were wont
For swelling buds rich glowing gems to bear ;
And men were formed with strength of limb to pass
At ample stride the deep bed of the sea,
And turn the circling heavens with their hands ;
Though in the freshness of the new-sprung Earth,
When first she ushered forth her animals,
Innumerable seeds hid in teeming breast,
She gave no signs of such creations mixed.
For see, all plants that flourish of all kinds,
The towering trees, grasses, and flowering shrubs,
Grow not with stems involved and mixed, but all
By a sure law Nature's distinctions keep.

More rugged then were men in every field,
Rugged as fit, sprung from the rugged Earth.
Framed, too, and founded with more solid bones,
Of ampler size, with tougher sinews knit,
Not easily to yield to heat or cold,
To changing seasons, or to fell disease,
To hard subsistence, or corporeal ills.
For many lustres of the circling sun,
A wandering life they led akin to brutes.
No brawny arm knew then to guide the plough,
Skilled well with iron to subdue the field ;
No hand was taught to train the trailing vine,
Or plant young saplings in a glebe prepared,

Or curb with pruning-hooks redundant shoots—
But what nutritious gave the sun and showers
What Earth spontaneous reared were gifts enough
To fill their modest wants ; brown acorns then,
And purple haws that winter blushing shows,
Subsistence gave to rude, unpampered tastes.
Fresh springs invited to allay their thirst,
As now 'mid lofty hills the waterfalls
Call with loud voice the thirsty troops from far.
Then, wandering, they the woodland temples held.
Haunts of the woodland nymphs—the well-known
 haunts
From whence they knew flowed gliding, silver streams,
Bathing with ample flow the humid rocks,
Distilling water from their coats of moss,
And thence escaped soft murmuring through the plain.

Nor knew they yet how to subdue by fire
Tough-veined metals, or to clothe themselves
With shaggy spoils from beasts ; but men unclad
Wandered in woods and hollow hills, or in
Protecting thickets hid their squalid limbs,
A shelter seeking from the wind and rain.
No cognizance had they of common weal,
Nor knew the guardian providence of laws.
What fortune gave to each he took at will—
At will alone, instructed how to live.
Then love united lovers in the woods—
Together drawn by mutual allures.

Or headlong violence of lust in man
Prevailed o'er woman; or he favors bought
With tempting prize of nuts, or pears select.

Then hardy men, trusting to marvellous skill
Of foot or hand, pursued the forest tribes
With missile weapons, or with massive clubs.
Many subdued, in coverts hid from some.
Then like to bristled boars their rugged limbs
At night for rest they naked laid on earth
Where night o'ertook, or sought their leafy lair.
Not terror-stricken, wandering through the night,
Seeking with loud lament the sun withdrawn,
But silent, sunk to sleep, waited the morn,
Till sun with rosy torch relumined heaven.
From early years accustomed to perceive,
Light darkness chasing—darkness chasing light,
'Twas not for them to wonder or distrust
Lest, lost the sun, night should eternal reign.
But rather 'twas to fear lest savage beasts
Should deadly make their sleep; oft miserably
In fearful haste they fled their rocky tents
At rude intrusion of a bristled boar,
Or lion fierce,—compelled in night to leave
Their leaf-strown couches to a savage guest.

Not more nor less than now, the tribes of men,
Left then the precincts of swift-gliding life.
Though sometimes then one caught in savage jaws

A palpitating food, filled woods and hills
With shrieks and loud laments at horrid sight,
Of living buried in a living tomb.
While some escaped with mutilated limbs,
Held trembling hands o'er lacerated wounds,
And death invoked with terror-stricken cries ;
Till void of help—the healing art unknown,
Foul worms at length their lingering life released.
Not then, howe'er, one day destruction brought
To thousands marching in the ranks of war.
Not then the raging sea on savage rocks
Dashed ruthless, ships and freight of living men ;
Idly then raged the waves' collected might,
And sunk without a prey their dreaded crests ;
Not all the allurements of the placid sea
Could then entice men with her rippling smile,
Presumptuous to trust her watery ways,
And hidden lay mad navigation's art.
Gaunt hunger then, and pining want brought death
To wasted limbs ; now rank abundance kills.
Then, poisonous draughts unwittingly were quaffed ;
Now far-sought poisons drench a neighbor's cup.

Next after they had huts and skins prepared,
And learnt the use of fire ; and woman joined
To man in wedlock rites—of twain made one,
Brought in its train connubial joys—chaste love,
To one appropriate and confined ; when soon
They saw an offspring rise, part of themselves.

Then first mankind began their former rude,
And hard-enduring natures to relax ;
Effeminate made by warmth, their shivering limbs
No longer could endure cold of the open sky ;
Love mined their savage strength, and children's arts
Subdued the untamed temper of their sires.
Then neighbors 'gan to join in social league
With mutual bonds, 'gainst violence and wrong ;
Then tender children, and the female sex
Clung for protection to the stronger man ;
The tender mother, fostering her child
With gentle gesture, and with soothing words,
Then feelingly proclaimed that all the weak
'Twas fit the strong should pity and protect.
But not at once could concord reign supreme,
Faithful though many held to plighted faith ;
Else had the human race become extinct,
Nor could have drawn their generations out.

Nature impelled their tongues to varied sounds,
And use forged out for men the names of things ;
As children now, for want of words, are wont
By earnest gesture, and the finger's point,
To show an object as a thing desired ;—
All feel within a conscience of their powers.
The steer, with budding horns scarce yet revealed
On his unarmed head, provoked, will gore ;
The youngling panthers, and the lion's whelps,
Wage mimic war with open jaws and feet,

While scarce developed yet, or tooth, or claw ;
And all the feathered tribe when danger threatens,
Trusting to flight, seek tremulous aid from wings.

That one sole man gave names to things, and taught
All vocables, is folly to conceive !

For how could one to all appoint their tones,
And fashion utterance for the tongues of men,
Applying names distinctive, when they all
Have equal power to frame them as they like ?
Besides, had they no speech, how came to him
The apprehension, and the innate sense
Of what he wanted—what he sought to do ?
For one could not submissive hold the rest,
Imposing will to learn, nor could convey
To unsusceptive ears what he would teach ;
Nor would they suffer him imposing names
To stun their ears with unaccustomed sounds ;—
But what the wonder if the human race,
With powers of voice endowed, should gradual mark
With varied sounds all varied things, when brutes,
Though dumb, are wont to utter cries,
Expressive of their grief, or fear, or joy.
The fierce Molossian dogs enraged in fights,
With teeth laid bare, send forth far other cries
Than when their throats with baying fill the air ;
Or when, with tongue caressing, they their young
Lick into shape, fondle with sheathed claws,
And with refrained teeth pretend to bite.

How different, too, from the beseeching whine,
When they howl dismal in deserted house,
Or yelping cower submissive to the lash.
How differs, too, the whinny of the horse,
When, pierced in flower of age with darts of love,
He raves among the mares, from the loud neigh
He sends from nostrils broad, 'mid rattling arms,
Or when with trembling limbs he shrieks with fear.
The winged tribes, the varied fowls of air,
Hawks, and the ospreys, and the wild sea-gulls,
Seeking subsistence on the salt sea waves,
At different times, far differing sounds emit ;
When struggling for food, or waging fights, or when
They change with weather's change, hoarse-throated
cries.

The ancient generations of the rooks,
The trooping crows, 'tis said, with altered notes
Now rain invoke, and now the windy gusts.
If varied sense thus animals impel
To varied cries, without divisioned sounds,
Much more should man articulate have power,
By differing words to mark all differing things.

Now to resolve the doubts that secretly,
Perhaps, your mind perplex,—know lightning first
To Earth brought fire ; to all from thence diffused—
As oft we see the palpitating gleams
Unfold the heavens, when heat hath steeped the sky ;
Or sudden bolt like to a tongue of flame

Falls to the earth and fires the pitchy pines
Like torches lit by a celestial hand.
And oft the nodding top of wide-branched tree,
Wars with a neighbor top, swayed by the winds,
And leaps to flame by fierce attrition urged.
Thus either cause might Fire confer on men.
The sun with mellowing rays throughout the Earth
Ripening the cruder fruits, taught men the art
Viands to dress with the subduing heat.
And, day by day, inventive genius led
By new discovered arts, subsistence rude,
And former life progressively to change.

Then kings began cities to found with towers
And citadels—a refuge and defence ;
And to divide the fields in propriety,—
Once common now to each as they excelled
In beauty, strength, or wit ; for beauty then
And wit were prized, though most availed strength.
Soon property began, and wealth arose
That wrested honor from the prized before,
And strength and beauty bowed submiss to gold.
But did right reason govern human life
Sparing to live content were greatest wealth,
Nor could be poverty where are few desires.
But men aspire to honor, fame, and power
To found their fortunes on a stable base,
And live luxurious lives in opulence.
In vain ; since all contending in the maddening race

For fortune's height ; they deadly make the path,
And when attained lean envy like a bolt
Hurls them from topmost round to death despised ;
For envy, like the lightning, strikes the height,
And all that towers above with lofty head.

Hence better 'tis in quiet to obey
Than empire wield, and kingdoms wide to sway,
Since all-contending in ambition's path,
They toil in vain, weary and sweating blood ;
They savor honor with another's mouth,
Seek not what most delights their proper sense,
But what is prized in the senseless buzz
Of popular applause. (Such, such are men ;
Such they have been, and such will ever be !

Hence kings were slaughtered, and subverted lay
The majesty of thrones and sceptres proud ;
The glorious ensign of the sovereign head
Now mourns in dust its lost prerogative,
Spurned by a vulgar foot ; for to the base
'Tis sweet to trample on what once was feared.
Now sovereignty sinks down to lowest lees ;
The rabble rule ; all burn with lust of sway,
And each the vilest wins his way to power.
Not long such contest could endure ; full soon
The human race, worn out with life thus passed
In violence, exhausted lay with feuds,—
Thence eager sought the guardian restraint
Of stable laws and power-armed magistracies ;

For anger seeks more bitter dire revenge
Than guardian laws concede. Then 'twas that men
Dragged weary laden lives, whilst deadly fear
Of pains retaliatory stained the sweets of life,
And violence and wrong clung like a net
Round all; for retribution oftenest on
His head returned the blow whence first it sprung;
Nor could he live secure who violates
The bond that gives community its peace.
In vain he seeks to hide from gods and men,
Secret distrust will hold him as a prey,
Bewildering dreams shall haunt him in his sleep,
Delirious fever force his tongue to speak,
And give to light his bosom stuffed with crimes.

(And now the cause that through wide nations spread
Belief in gods and all divinities,
With altars filled cities and towns, and 'stablished
rites
That flourish yet in many a sacred place,
'Tis easy to explain; for even now,
The same deep-seated fear in hearts of men,
Raises new shrines to gods throughout the earth,
Impelling them to keep their festive days.
In earliest times the dying races saw
In waking sight faces and forms divine,
Majestic semblances; and more divine,
More marvellous in size, came in their dreams.
These when they saw they straight endowed with life;

When they beheld these creatures of the mind,
Their limbs to move, and heard a dreaded voice
Suited such glorious look such power supreme!
They dowered them soon with life immortal too;
For since that look divine returned the same
And form inalterable, not easily
Could they believe that beings thus endowed,
Could subject be to violence and chance;
Seen thus in dreams working such wondrous deeds,
With untaxed powers that knew not of fatigue;
They deemed them thus far 'bove the reach of fate,
And unassailable with the fear of death.
And when they saw the circles of the sky
Turn in an order fixed, and seasons change
In annual round, nor could fit causes know
Such wonderous revolvings to perform,
They, for a refuge, yielded all to gods,
And made all move obedient to their will.
They placed in heaven their sacred dwelling-place,
Since there the sun, there rolls the moon, from thence
Comes day, thence night, there night's dread engines
play,
The wandering meteors, and the winged flames,
Clouds, winds, and rain, lightnings, and hail, and snow
And the dread thunder with a threatful noise.

Ah! miserable men, ascribing such
Power to the gods, suradding dreadful wrath!

How many groans! What wounds you for yourselves
Prepared! and us—what tears for all to come!
No, 'tis not piety thus veiled to come
Suppliant to turn towards the senseless stone,
Prostrate to bow to earth and spread the palms
Before the shrine of gods, nor altars stain
With profuse blood of beasts, vows weave on vows;
'Tis rather piety with peaceful breast
To look on all, accept the lot allowed;
For when we lift our eyes to azure courts
Above—the temples of the sky—and see
The ether studded with its glittering fires,
And think how charioted must be the sun
And moon their courses to perform, our hearts
Oppressed already with such thoughts too high,
Another doubt soon rears its threatening crest:
How stands to us the mighty power that guides
In such involved orbs the rushing spheres?
The want of fit explanatory cause
Torments the doubting mind,—o'erpowered it asks
Whence took the universe its birth, and what
Shall be its end, or can its pillars last
Divinely dowered with immortality
To bear through endless time triumphantly
The mighty rack of such stupendous rounds!
Besides, what soul quails not at dread of gods?
What limbs creep not with fear when the scorched earth
Trembles beneath the lightning's lash, and the
Resounding crash of thunder shakes the world?

How quake the nations then, and mighty kings,
With trembling smote, embrace the knees of gods !
Lest now were come fierce retribution's hour
For something proudly spoke or basely done !
So when wild tempests over ocean sweep
Leaders and legions and the pomp of war—
Their fleets a plaything in the hand of storms—
How come the proud commanders then with prayers,
And votive gifts, imploring peace from gods !
In vain ; since not the less for prayers they oft
In whirlwinds seized are borne to shades of death.
A power unseen thus crushes human things,
Tramples beneath its feet, and makes a mock
Of all the ensigns of a human power—
The honored fasces, the avenging axe,
The pride, the pomp, and dignity of man !
So, when beneath our feet the great globe shakes,
And smitten cities fall or threat to fall,
What strange if mortals should despise themselves,
And tremblingly defer all power and might
To the great gods to rule and govern all.

And now to tell how metals were revealed :
Then first was gold and brass and iron found,
The gleaming silver and the duller lead,
When fires on lofty hills had wasted woods ;
Lit by the lightning's casual fall, perhaps,
Or by design in the first rustic wars,
To terror strike a foe, or, better purpose,

To subdue the wilds and open pasture walks,
Or beasts of prey to kill, and win their spoils—
For hunting was with pitfall and with fire,
Before investing toils or hot pursuit
With dogs. However sprung, when once the flames
Had with loud crackling noise consumed the woods
To lowest roots, and fervid made the earth,
The ductile stream of gold, silver, or lead
Flowed out in glowing veins to earth-formed moulds,
And, soon concreted, showed their lustrous shine.
Rude men, attracted by the glittering toy,
Lifting, surprised saw in the massy clod
The form and feature of its earthy mould:
Straight came the thought ductile again to make
By heat the rugged mass, and cast in forms,
Or malleable made by forceful hammers to
Shape to convenient form, pointed or sharp;
And thus fit tools prepare forests to fell,
The rough to hew in beams, or smooth to planks,
To perforate and join as use required.
Nor less for this at first silver and gold
Were sought than tougher grain of brass. Soon how
For use unfit their blunted edges showed.
Then brass was prized, neglected lay the gold;
But time revolving changes ranks of things—
Now, brass despised, gold 's held in highest prize,
And daily sought the more,—and found adorned
With the admiring praise of changeful men.
How step by step the ruder iron's use
Came to be known, 'tis easy to conceive.

The earliest arms were fists, and nails, and teeth,
Stones, or the knotty fragment of a tree,
Or flaming brands were hurled in the first fights.
The deadly edge of iron or of brass
Came later—brass the first, as easiest wrought—
For brazen shares furrowed the early fields,
And brazen arms, gleaming in ranks of war,
At wide-cast sowing ghastly wounds and death,
A bloody umpirage held o'er flocks and fields,
All the unarmed yielding to the armed.
Then gradual advanced the iron sword
And made a mockery of the blade of brass;
Now iron turns in fields the stubborn glebe,
And holds the balance in the lists of war!
And earlier 'twas to mount the foaming steed,
By the left hand restrained, sword-armed the right,
Than in a chariot 'tempt the fight, or with
Scythe-armèd wheels to havoc wide the fields.
The Carthaginians first built towers upon
The huge rough-hided elephant, and brought
Their bulk immense to trample down the ranks
Of ranged battle, or with tusks to rend.
Thus dire contention day by day gave birth
To fateful arts and deadly enginery,
Suradding horrors to the guise of war!

Soon they essayed the tusked boars to train,
And bulls, for fight, and launch them on their foe—
And some to battle went with dread advance

Of Parthian lions, and armed leaders who
With chains might guide their fury or restrain.
A vain attempt. Mad with first taste of blood,
They savage routed ranks without regard
Of friend or foe—fearful alike to both,
With tooth and claw they fleshed alike on all,
Shaking on every side their dreaded crests.
Nor could the horsemen frightened steeds restrain,
Or hold against the foe; the lionesses
With deadly leap forth rushing on all sides,
With open jaws dashed on advancing ranks,
Or sudden turning, unawares tore down
Their leaders, bearing both to earth with wounds,
Bound in a horrid grasp of tooth and claw—
Bulls tossed the boars, or trampled under foot,
Sought with fierce upward blows the horse's flanks,
Or gored them on the ground with dreadful roar.
The boars their masters tore with savage tusks,
Stained with their blood, spears in their body broke
And mingled ravage spread through horse and foot;
The horses fled, avoiding transverse blows
Of bloody tusks, or rearing pawed the air.
In vain; hamstrung with blows oblique, rider
And horse together fell, shaking the earth.
Thus those that near the stall subdued appeared,
Were seen to rage in the dread acted field,
'Mid wounds and cries, terror, tumult, and flight,
Nor knew restraint; the maddened elephants
Fled wounded, dealing death to those that led

Their huge bulk on ; by retribution fit
Dealing to them the fate they had prepared.

All this dread enginery of havoc they
Contrived, not, as I think, unmindful of
The pains they with their foes should share ; rather
By dire contention's universal law,
Prevailing through all worlds, and not confined
To this alone ; arraying all 'gainst all—
The weaker number, and unarmed did this,
Not with the hope to conquer, but that they
Might give their foes in dying cause to mourn.

The knotted garment was before the wove,
And after iron came the weaver's art,
Since that alone could his light tools prepare
Spindles and shuttles, and the sounding beam.
Nature led men to work in wool before
The female sex, as cunninger in art.
But soon the hardy swains such toil despised,
Left it to feebler hands ; as nobler work
Called forth their brawny strength, and they applied
To rougher labors—made thereby more rough.

Creative Nature's self taught men to graft
And sow the germ-enveloping seed ; they saw
Where berries from the tree, or fallen nuts
Threw up beneath swarms of aspiring shoots.
Then they at will selected scions joined

To stranger stock, left to its nursing care ;
Or planted in the tilth the new-sprung slips.
The well-loved fields by culture thus subdued,
The Earth indulgent saw her wilding fruits
Their wildness yield to cultivation's art ;
And day by day, the woods hemmed in, retired
To mountain skirts, to culture left the plain ;
Meadows, and standing corn, rejoicing vines
Possessed the level meads and rolling downs,
And the green thread of olive interwove,
Marked hill and valley with their verdant tufts ;
As now you see, marked with distinctive blush
The cultured field adorn, and hem the wild.

With voice to imitate the song of birds,
Was earlier practised, than to soothe the ear
With measured chant of modulated verse.
The breath of zephyrs sighing through the reeds
Taught rustics first to sound the hollow cells ;
And, step by step, they learnt the soothing plaint
Which the pipe pours by cunning fingers touched,
And voice accompanying, heard through pathless
woods,
Till woods and lawns resound ; and woke to song
The shepherd walks, and solitudes divine.
Such things would soothe and gratify their minds
With soul-subduing art ; the swains confessed
An influence new—well pleased, refined ; and then
Delighted most when satiate with food ;

For then the mind most opens to delight.
Then often, too, in social groups reclined,
Under embrowned shades, near whispering streams,
They led glad lives without luxurious pomp ;
Then most when seasons smiled, and the young year
Painted the verdant grass with gem-like flowers.
Then jests the rally and the quick reply ;
Then bursting laughter reigned ; the rustic muse
Then flourished fresh as close to Nature's side.
Glad frolic prompted then shoulders and head
To pile with wreathed flowers ; and swains impelled
Moving stiff limbs in rude, unmeasured dance
To beat their mother Earth with vigorous feet.
Then sprung loud laughter—sweet, restrained smiles ;
For all was new—and all as new admired.
To them awake were glories like to dreams,
While joys like these beguiled their hours from sleep.
Glad Nature's revels them impulsive led
In many modulations, to draw out
The voice in liquid lays, and weave the song ;
Or with bent lip run o'er the rustic reed.
Our nightly pomps preserve these joys impaired,
And art refined has skilful measures taught ;
But gives no greater measure of delight
Than from rude numbers took the earth-born race.
The present good is deemed to be the best,
If naught we've known more pleasing e'er before ;
But greater good discovered, pales the past.

Thus, Ceres, gift of corn, turned to disgust
The former acorned feast, surpassed, despised.
The softer vesture and luxurious beds
Brought scorn to leaf-strown couch and shaggy dress
From skins, which to the first wearer roused, I ween,
Such envy that his life a forfeit paid
To plots and deadly wiles, the prize to win ;
That in the struggle rent, besmeared with blood,
Left to the plunderers a sorry spoil !
Then skins ; now gold and purple robes inflame
The minds of men, and wear them out in war.
Hence, as I think, the greater is our crime.
For cold had pierced the naked earth-born sons
Without protecting skins—spoils of the chase.
While us harms not the want of purple vest
Decked with its gold and fringed embroidery,
When the coarse wool better defends from cold
The shivering limbs. (Thus men labor in vain,
And waste their lives in idle wants and cares—
Not knowing the true limits to desire,
Nor what beyond no further good can bring ;
By slow degrees, they launch their lives upon
A vexed sea, and drown themselves in waves
Stirred from the depths—tumultuous waves of war.

(The great and changing temples of the sky—
The sun and moon their watches set in heaven,
Circling in light and dark their changeful course,
Taught men the seasons' change, and Nature showed
Evolving all by fixed unvarying laws.

And now lived men girt by protecting towers,
And tilled divided lands ; each knew his own.
The barren sea blossomed with snowy sails,
And politics and social leagues united towns.
Not long were letters known,—divided types
Of sounds articulate,—ere poets began
To chronicle in verse heroic deeds,
And from oblivion snatch them thus embalmed ;
For what was earlier done our age cannot
Recover from the past, nor know it more
Than the dim trace that reason can discern.

To plough the fields, the ocean wave to plough,
To found fair cities 'neath protecting walls,
And give to them the guardianship of laws,
Experience led ameliorating life.
Arms, roads, and garments, and like things of use,
The sweet rewards—the dear delights of life,
Poems, and pictures, statues, temples, fanes,
Want, and the restless energy of man
Taught gradual, step by step, the advancing age.
Time slowly thus evolved each social art
And reason brought them to the shores of light ;
One from another takes lustre and growth
Till each attains its culminating height.

BOOK VI.

METEOROLOGY.

Praise of Athens.—Meteoric Phenomena—Of Thunder—Lightning, how produced—Thunderbolts, how formed—Not hurled by the Gods.—Of Water-spouts.—Clouds, how formed.—Of Rain—Snow—Hail.—Of Earthquakes—Volcanoes—Ætna.—Overflow of the Nile.—Of Avernall Lakes.—Hot Springs.—Of the Magnet.—Of the Origin and Cause of Disease.—Description of the Plague of Athens.

BOOK VI.



ILLUSTRIOUS Athens to poor mortals first
Taught humanizing arts of husbandry,
And gave them social leagues secured by law,
Ameliorating life before forlorn !
She gave them first sweet solaces of life,
When she great Epicurus gave—the man
With genius fired—with ardent soul endowed
To pour from truthful lips all wisdom old—
Though dead his great discoveries remain,
And bear throughout the world his vast renown !
For when he saw subsistence was assured,
And life secure from violence and wrong—
All goods external in full measure heaped ;
Yet men with wealth abounding, and with sons
And daughters round an honorable crown !
Bore not the less within their souls oppressed,
With fears in reason's spite tormenting life,
And forcing them to querulous complaints—
Well knew he then the soul the cause of ill,
That like a tainted cup taints all within ;
To evil turning Nature's bounteous gifts,
Or letting them escape—a leaky sieve,

No flood of blessings can avail to fill.
Well sought he then the soul with truth to purge,
And limits give to fear, and mad desire ;
Unfolding the true good, the aim of all,
What 'tis, and how by narrow path to reach !
He signalized the ills that cleave to man—
His nature's foibles, that essential cleave
By Nature's law, necessity or chance—
Showed what the gates of ill ; how it assails ;
Whence comes exposure ; how we lend our sides
To Fortune's arrows, and invite the blow ;
Then how we can oppose, how meet, resist ;
Convincing men causeless most part, and vain,
Involve themselves in the sad waves of care.
For e'en as children tremble in the dark,
And all things fear ; we tremble in the light,
And ofttimes fear things no more worthy fear
Than what affrightens children in the dark,
Filling the future with foreboded ills.
These terrors of the soul, this blinded mind,
Not the sun's rays—bright arrows of the day
Can with their light dispel ; but reasoning sound
Unfolding Nature's aspects and her laws.
Wherefore the more such undertaking vast
To clothe in fitting words my verse proceeds.

And since I've showed the world's vast fabric bears
Destruction's seeds—that e'en the heavens are mortal,
Formed of a body that took birth in time ;

And have resolved how all goes on in them,
And must go on by fixed, unvarying law—
What now remains to crown my work complete ;
Since once embarkéd in an arduous course,
The hope of triumph fires the goal to win,
And what opposed once overpast, becomes
Impulses high to finish the career.

When men on what in heaven and earth is done
With fearful souls in contemplation dwell,
The dread of gods will prostrate and subdue,
And ignorance of causes them compel
To give to gods the empire over things,
And Nature's governance yield up to them.
E'en those who know the gods dwell in repose,
If still they wondering pry, and seek to learn
How all is done in the ethereal courts,
Will soon be bound in Superstition's chain ;
Invoking lords severe, whom miserably
They deem all-powerful and supreme.
Unknowing what can be and what cannot,
What limits each by bounds profoundly fixed,
They wandering wide in wild delusions stray ;
Which not rejected and afar repelled,
Thus thinking things unworthy of the gods
And foreign to their peace, their injured
Divinities will oft o'erhang the soul.
Not that their peace can violated be,
That anger should impel revenge to seek

By direful punishment for aught offence,
But you yourself by wild imaginings
Drag them from peaceful seats, and madly deem
The dwellers in repose—the placid gods,
Will roll on us the billows of revenge.
Not then with peaceful breast can you approach
The shrine of gods, nor calm your breast receive
The images their forms dispense to men,
Those messengers divine—guests of the soul—
How then tormented must your life become!
And though I've taught right reason must reject
All that as false, must from the mind repel;
Much yet remains to be adorned with verse—
Laws to unfold that rule above our heads,
And all the changing aspects of the sky.
To tell of tempests, and the dazzling play
Of lightnings, what their effects, and whence they
spring;
Lest, fooled and trembling, you divide the sky
In quarters whence may come the wingéd fire,
And where withdraw; seeking the impelling power
By which it penetrates thick barriers,
Then bears away triumphant over bonds.
And lacking power such marvels to explain,
You deem them work of some divinity.

Oh, Muse of wisdom! Calliope! joy
Of men, delight of gods above! aid thou,
In this my last, as in my former lay!

That, by thy guidance, I may win the crown—
Bright meed of poets and philosophers !

First thunder shakes the azure fields of air,
When the aërial clouds, sailing aloft,
Together rush, driven by warring winds ;
Nor thunders the serene ; but when the clouds
In densest folds collect, then loudest comes
The thunder's crash and dread reverberate roar.
But not with body so condensed are clouds
As wood or stone ; nor thin, like mist or smoke,
Else they from weight would fall abrupt like stones ;
Or, wanting due consistency, their folds
Could not bear up the arrowy sleet and hail,
Nor the thick burden of the snows transport.
Oft too, clouds send forth explosive sounds,
As wide-spread awnings stretched on masts and beams,
Swayed by the winds, like bursts of sound emit ;
And sometimes, vexed and rent by snappish winds,
They imitate the sound of parchment torn ;
And shattering sounds in thunder you may hear,
Of sails or garments rent, or flying sheets
Hurled ribboned through the air by gusts of wind ;
Sometimes they meet, but not with adverse fronts,
But moved athwart rub their contiguous sides,
Whence a dry, grating sound assails the ear,
As forceful through confined passage drawn.

And in this way from thunder all things quake,
As though the walls of the capacious world,

Shattered and rent, would wide asunder leap.
Sometimes a mighty storm of gathered winds
Entwines itself with clouds, and, shut within,
A rushing whirlwind grows; then clouds condense,
Vast hollows making with thick envelope;
Till with impetuous force the walls explode,
Dispersing fragments with a rattling noise.
Nor wonderful is this, since bladders blown,
On sudden burst, give like explosive sounds.

And reason is winds through the clouds should
 roar,
Hurling their jagged sides, as oft we see
Clouds fan-like spread like trees borne wond'rous on;
And when thick-falling blasts the forests rend,
Their tops give murmuring sounds, and branches roar;
Sometimes the incited winds by blows direct
Shatter and rend the clouds—what such assaults
Can do on high, judge from what's done below
With feebler powers, as on the earth we see
Oft lofty trees uprent from lowest roots!
And in the clouds are waves, that breaking give
A heavy sound, as on broad rivers or the sea,
Hoarse breaks the surf, and loud the billows roar.

From clouds to clouds when living lightnings leap,
They're sometimes caught in deluges of rain,
And strangled instant with tumultuous roar.
As the red iron hisses from the forge,

Sudden in water plunged—if drier clouds
Receive the vagrant fires, forthwith inflamed,
They burn impetuous with a deafening noise ;
As when the flames, resistlessly borne on,
Ravage the pride of some thick-laureled hill,
The branches burn, licked up with roaring sound ;
For than the Delphic laurel there's no tree
Gives in the flames a louder crackling noise.
Oft crashing ice and hail together hurled
Emit hoarse sounds on high, when mighty winds,
Them forcing to a strait, grind and break up
The frozen billow clouds, mingled with hail.

Lightning is seen to gleam where'er the clouds
By fierce concussion force out seeds of heat ;
As when the flinty rock strikes flint or steel,
Light leaps, and fire rains down in glowing sparks.
We see the lightning ere the thunder hear ;
For quicker comes the impulse to the eye
Than to the ear ; as plain to be perceived
By watch of woodman laboring with axe,
To fell the pride of some wide-spreading tree ;
The falling blows are seen before the sound
Comes to the ear ; so blinding lightnings come
Before the thunder, though from self-same cause
Springs thunder and its fleet, vaunt courier, light,

And in this way the clouds the region tinge
With light, and clouds lower with a tremulous gleam.

When winds invade a cloud and turns within,
It mines in hollows, thickening its folds,
And makes it with its rapid motion glow ;
For all by motion, as we know, takes heat ;
The ball of lead e'en melts in rapid flight—
When fervid thus bursts sudden the black cloud,
It scatters seeds of heat, forceful expelled,
And shows a gleam of lurid flickering flames ;
Then slower creeping to the ear comes sound
Than glances to the eye the winged light.
When thickening nimbus in dense folds collect—
Clouds piled on clouds above a wondrous press—
Be not deceived that, viewéd from below,
They greater spread in breadth than reared in height ;
For see, when winds bear cloudy pillars on
In shape like mountains, or see mountains piled
On mountains, and the cloudy summits rear,
When sleep the winds their lofty battlements ;
Thence you may know how great their bulk, and see
Vast caverns scooped as 'twere in hanging rocks ;
Which winds at rise of tempest fill, and, shut within,
Tumultuous roar like wild beasts shut in dens.
Now here, now there, low mutterings send through
clouds—
Seeking escape, on all sides whirled about,
And heat evolving from the folds condensed
Roll flames in hollow furnaces, till burst,
Far gleam the heavens and wide with forked light.

And from same swift-winged cause is poured on
earth

The golden colors of a liquid fire ;
For clouds within have many a fiery seed,
That, purged of vapor, paint them, when at eve
They deck themselves with azure and with gold ;
As from the sun they drink abounding light,
They needs, when winds driving compress their folds,
Must pour abounding forth the blushing stores,
Showing resplendent and flame-colored hues ;
And lightnings play on the aërial vest,
When winds gently the clouds diffuse ; for then
Their fiery seeds they drop, and wide their skirts
Innocuous play, with silent, fitful gleams.

And now the nature of the thunder-bolt
Their strokes declare, and branding signs of fire,
And breath sulphurous ; for all these are marks
Of scorching heat, and not of wind or rain.
And more, they fire our roofs, and the quick flames,
Revelling, o'ertop the loftiest battlements ;
For Nature hath endowed with subtlest seeds
Of heat the dread strong-handed minister,
Pervading bolt that nothing can resist ;
So passes it unchecked, through walls, through rocks,
And in an instant diffuse makes the cup,
Or from the cup unharmed chases the wine,
Its pores relaxed by the insidious heat,
Which not the darting sun in time could do,

So much more puissant, with its forked heat,
Is lightning's glancing and pervading might.
Now whence begotten, and how formed the power,
That with resistless strength can strike down towers,
Rock houses, and disperse rafters and beams,
Waste the proud monuments of men, and men
Strike instant dead, and lifeless prostrate flocks—
Whence comes, I say, the power all this can do;
No more delaying, I will now unfold.

The thunderbolts take birth in piled-up clouds,
Nor fall they ever from a sky serene;
Nor come their strokes from a light filmy cloud;
But then they come, as manifest facts declare,
When clouds thick folds have gathered from the air,
That we might think that all the shades had left
Dark Acheron, and filled the vault of heaven,
So thick a night of gathered storms and clouds
Hangs o'er our heads—such direful forms of fear
When tempests forge their bolts. Portentous oft,
Like to a pitchy river from the sky let down,
A black storm-cloud with fire replete descends
Upon the sea, and wide by tempests winged,
Its dusky burden borne, pregnant with bolts,
Advancing to the land with dreadful march,
To shelter drives men terror-struck and beasts.
Hence must we think that high above our heads
Tempests are piled on tempests, storm on storm,
Nor with such blackness could they shroud the sky,

Make night untimely take the place of day,
Were clouds not heaped on clouds, strangling the sun ;
Nor with such deluges could they flood the earth,
Make rivers overtop their continents,
And with unwonted seas lay waste the fields,
Were Ether not high piled and thick with storms—
And these are all with fire and wind replete,
Whence growling thunders and fierce lightnings come ;
For hollow clouds must, as I've taught, contain
Innumerable seeds of heat ; for needs they must
Draw many such from sun's fierce rays, and fires.
These when the winds assemble to one place,
It forces out their elemental heat,
That, mingling itself with the exuded fire,
The sinuous whirlwind turned in narrow strait,
Forges the bolt in red-hot furnaces—
The glowing breath by double cause inflamed,
Its own velocity and contiguous fires—
When heated thus by winds and lashed by fire,
Bursts sudden forth the red, ripe thunderbolt ;
The glowing ardor glancing quick unfolds
The region round, follows reverberant noise,
As crashing were the temples of the sky ;
Then tremblings shake the earth, hoarse mutterings
roll
Through vaulted heaven, and groans the firmament—
Straight on the shock follows the torrent rain,
As though the skies converted were to seas,
And falling would with deluges o'erwhelm !

So great a flood descends when bursts the cloud,
And sound tumultuous comes from branding stroke.
Sometimes again wind rushing from without,
Fierce falling upon clouds, gravid with storms,
With pent-up lightnings fraught, rends them abrupt ;
Forthwith the meteor falls, a fiery whirl
We call the thunder-bolt, and falls the same
In other part where'er the power is borne.
Sometimes a blast of wind devoid of heat
Will fervid grow in a long rapid flight,
Strewing upon the way its grosser parts,
Abstracting from the air the spirituous,
That mingling generates fire by onward tract ;
As in swift flight all fervid grows the lead,
Losing its rigid elements in air,
And onward flying liquefies by heat.
And it may be sheer violence of shock
Can force out fire e'en from cold blast of air ;
For, when impelled it strikes with vehement force,
The elemental heat streams forth from it,
And from the thing encountering the blow ;
As when the flint strikes steel, though cold the steel,
Yet not the less fire leaps beneath the blow
Igniting all apt to receive the flame.
Nor lightly think the mighty power of air
Can in itself be cold—sent from above
With violence below—it must thereby,
Though kindled not, by going gather heat,
And laden hot with tepid vapor come.

The fleetness of the lightning and its power
Comes from incited force that, chained in clouds,
Collects a mighty impulse at the start ;
And when the cloud no longer can restrain
The gathered impetus, the meteor bursts,
As missiles from the strong balista thrown ;
Add then minute and polished elements—
Not easy 'tis resistance to oppose
To such consistency that gliding winds
Through minute pores, and checked by no delay,
Bears itself on with headlong impetus.
Again, as weights with violence press below,
An added impulse fleeter makes their flight ;
So bolt in falling, shattering all opposed,
Dispersing fragments, keeps an onward track ;
Besides what from a long flight comes gathers
Velocity by going more and more,
Swells robust powers, resistless makes the blow ;
Summoning its elements from all parts around,
That rushing join the flight ; or coming they,
Reinforced perhaps, draw something from the air
That gives increased momentum to the blow.
Some substances it traverses and leaves unharmed,
The fluid gliding through interstices ;
While some it shatters, when the lightning's form
Encounters obstacles that cohesive hold,
While brass it melts, and dissipates the gold ;
For such the power of elements minute,

They easily insinuate, and thus
Dissolve within binding affinities.

The glittering vault of heaven and the earth
Are shaken most when shine autumnal stars,
Or when the spring unfolds the flowery year.
In winter fail the fires; the winds lack heat;
Nor then are clouds so densely piled on high.
But when the season opens between both,
All lightning's causes varied most conspire—
The year's divisions mingle heat and cold;
For needs these both the meteor fierce to form
That springs in conflict of the elements,
When air raves with the strife of wind and fire.
In spring advances first the reign of heat;
Bleak cold deposed, retires; needs must contend
Such opposites, and mingling all turmoil.
In the autumnal season failing heat
Encounters rigors of advancing cold,
And winter struggling claims the mastery.
Well then are called these the war times of
The year; nor strange that then most lightnings gleam,
Most tempests howl through foul and turbid skies,
Since on all sides a doubtful war is waged—
Here ranged flames; there, winds mingled with rain.

The nature then of the fire-freighted bolt,
You well may know; its power, and how it acts.
Go not thou then to the Etruscan scroll,

Reciting backward spells to seek concealed
Designs of gods, by thunder's fall revealed.
Ask not whence comes the winged bolt, or where
Withdraws ; how penetrates prisoned recess,
How thence exulting flashes from its bonds,
Or how the bolt of lightning can destroy.
If Jupiter, or any other god
With thunder shake the sky—if they to earth
Launch hissing bolts where prompts each one the will ;
Why strike they not the wretch rampant in crime,
And make his blasted trunk exhaling flames,
A fearful warning to the race of men !
Why are the innocent and souls unsoiled,
Oft undeserved, blind victims made of fate,
Caught in a whirlwind of celestial fire !
Why aim they idly at deserted place ?
Wont are the gods by use their arms to skill !
Why blunt on senseless rocks the Father's bolts ?
Why suffers he, nor for his foes reserves ?
Why thunders Jove not in a sky serene ?
Waits he till clouds thick veil the skies, and then
Descends from nearer station to direct his blows ?
Why launch against the sea the bolt ? or why
Rebuke the waves, and lash the watery world ?
Would he that men should 'scape the direful stroke ?
Why grants he not dread missile then to see,—
Or would he whelm in fires them unawares ?
Why threat with angry voice to bid them flee,
Why shroud in darkness, and hoarse murmurs wake ?

Or can he, think you, launch to many parts
 At the same instant wide-divided blows?
 Or wilt assert this ne'er is done; but know
 O'er many regions hang the shrouding clouds
 That shed each one at once the blasting fires.
 Why strikes he often with blind hostile brand
 The sacred fanes, the seats revered of gods?
 Shatters the well-wrought image of himself
 With sulphurous wounds, dishonoring his shrine;
 Why strikes he often the exalted place
 And spares the low? for most the lofty hills
 Bear on their singed tops signs of his fire.

Now from these facts 'tis easy to explain
 The water-spout—the *prester* of the Greeks—
 How, formed aloft, they droop upon the sea
 In form of columns, when the vexed waves
 Tumultuous roar, lashed by infuriate winds.
 Ill fares the vessel in the turmoil caught—
 When the roused winds, pent up in clouds, cannot
 Prevail the tegument to burst, but bears
 It down, as if a mighty arm thrust forth
 A cloudy pillar from the earth to sea;
 Till, burst at length, the prisoned winds let loose
 To mad convulsions rouse the yeasty waves;
 When the fierce whirling power descending, draws
 The clouds in pliant folds, and thrust upon
 The deep, winds mingle with the waves, and plunged
 Within makes the possessed sea to boil,

Heaving its billows with tumultuous roar.
Or, it may be the vortex winds involve
With clouds, and rolling up their folds
Form water-spouts in air, that, drooping down,
Tempest the earth with whirlwind violence.
More rare occurring this on land, where hills
Their flanks oppose than on the uncumbered sea.

Clouds form aloft when floating vapors light
Co'lesce on sudden in the vault of heaven,
Held by slight mutual bonds ; first a light veil
Whose thin consistency scarce stains the sky ;
And this takes all that congregating comes,
And by conjunction grows ; and borne by winds
Swells a wild storm and tumult at the last.
Then hills whose tops are neighbor to the sky,
More lofty raised, more constantly they smoke
With the swarth darkness of the tawny cloud.
For when first clouds condense, before the eye
Can seize their thin consistency, their troops
The carrier winds collect on mountain tops ;
For thickest clouds we see to ether rise
From the moist summit of the veiled mount ;
And facts declare we mount to windy realms
When toiling we go up their scarp'd sides.

Besides, that Nature causes much to rise
In vapor from the sea, the garments hung
Near wave-washed shores, made damp by mist declare ;

Hence much to build the clouds there needs must rise
From ceaseless motion of the restless seas.
Then from all rivers, and from Earth itself,
Ofttimes we see the steaming mists go up
Like heavy breath forced out, and raised aloft,
Suffusing heaven with a dusky veil,
That, gradual thickening, grows at length to clouds ;
And radiant influence from the starry spheres
Of ether bears them down, and helps to weave
For the cerulean its cloak of clouds.
Or it may be to the assemblage come
From farthest heaven floating elements,
And add their tribute to the gathering folds,
Since I have taught these infinite, and showed
How swift they traverse the unmeasured space.
Hence 'tis not wonderful that in so short time,
As oft we see, tempests and storm-clouds formed
On high dispensed, can such vast mountains veil,
With thickest darkness shrouding sea and land.
Since on all sides, through all the tubes of air,
Through all spiracula of the breathing world
To elements open wide exit and entrance.

And now I have to tell how rain-drops form
In the dark lowering of the thickened clouds,
And how, let loose, the showers descend to earth.
First, I have showed moist elements float in air,
That rising form the clouds, vapors, and mists,
With all their watery stores ; as humors swell

With sweat and blood, in vigorous growing limbs;
And clouds in hanging fleeces, like a sponge
Licking up wet such moisture from the sea,
When borne by winds they sweep the liquid plains.
In the same way from every river lifts
The misty vapors to the gathering clouds,
That thus from all increase their watery stores;
Which laden they strive doubly to dispense,
Wrung by the winds, pressed by redoubling clouds
From ether coming, that, condensing all,
Open the sluices to descending showers.
Moreo'er, when clouds dispersed are by winds,
Or when struck by the sun's heat-bearing rays,
Dispersed they are above; the rains precipitate
And moisture trickles down, as wax near fire,
Melting, distils the frequent liquid drops.
But then comes rain most violent when clouds
Are pressed by weight and impetus of winds.
And gentler rains are wont, that longer last
When vapors damp abound, and clouds on clouds
Come thickening from above, and all below
The saturate Earth smoking exhales a mist.
Then when the sun from adverse part of heaven
Upon the cloud its glowing baptism sheds
Of ardent rays, straight the resplendent bow
O'er the dark drapery hangs its braided hues.

All other things that have their birth on high—
Snows, winds, and tempests, hail, and arrowy sleet,
Strong-handed frost, that seals the restless waves,

And puts a bridle on the rushing streams—
All these, and such as these,—how formed, and what
Their causes, you can tell, when well conceived,
The properties assigned to elements.

Now come the Earthquake's causes learn: and first
Conceive the Earth as on its surface seen,
So constituted is in depths below;
Hence, in its bosom holds vast windy caves,
Innumerable lakes, chasms, and pools profound,
With rocks abrupt, and cliffs precipitous.
And many rivers, hid beneath the Earth,
Roll waves tumultuous o'er submerged rocks;
For things throughout are like unto themselves.
The Earth thus formed below, trembles above,
Struck by intestine ruins when old Time
Crushes and crumbles up her caverned depths.
For when whole mountains fall, tremblings perforce
Must far and wide from the concussion creep;
Since with less reason, solid buildings shake
When roll the loaded wains along our streets;
And trembles earth around when coursers fleet
Hurry o'er paved ways the iron-bound wheels—
As oft with age a mined hill comes down
With hideous disruption to the plain,
So too, perchance, to subterranean pools
Masses of earth immense crumble through age,
And falling dash the waves; then quakes the Earth

As the containing vessel sways, when sways
Water within, nor rests till rest its waves.

Besides, when winds pent up in hollow depths
Bear to one part with shouldering violence,
They forceful heave the cavern's domed roof,
Till Earth gives way where the prone winds impend.
Then lofty buildings on the surface reared,
The more toward heaven they lift aspiring heads,
The more, bulging and forced awry they yield,
And started beams impend prepared to fall.
Yet men hold back, reluctant to believe
That to the World awaits a final day
With fated ruin and destruction fraught,
Though seeing Earth thus fail beneath their feet.
For did not then the unbridled winds refrain,
Nothing could check them rushing to destroy ;
But since their powers relax, and then reinforced,
Rallied, return ; again, repulsed, retire
With varying violence ; the Earth is thus
With ruin oftener threatened than o'erwhelmed.
And though to centre shook, yet gradually
By weight subsiding, she reseats herself
On firm foundations, though shattered and rent
The works of men, the more as loftier raised.

Another cause of fearful tremblings is
When some tornado coming from without,
Or sprung in some dark subterranean mine,

Rushes to hollow places of the earth
And with wild tumult raves her caves among ;
Till forceful whirling, bursting forth at length
In hideous yawnings, rends the founded Earth.
As happened once in Syrian Sidon old,
Seated upon the sea ; and once in Ægium,
In Peloponnesus famed ; when rushing air
Unfounded cities, and the earth made quake.
By Earthquakes, too, how many walled towns
Have been o'erthrown ? how many drowned in seas,
Cities and citizens together whelmed ?
E'en when such prisoned winds fail to burst forth,
They rush through veins of Earth, and tremblings
 come,
As shudderings oft o'er shivering members creep.
How then do smitten populations quake
With terrors overhead, terrors beneath
Their feet, lest caverns crumbled up should ope
Sudden wide jaws, ingulging ruins round.

Now learn why seas unconscious of increase—
For wonderful it seems how nature sets
Their boundary no wave can overpass ;
Why falling waters from the vagrant clouds,
Or tempests winged wide drenching sea and land,
Why freight of waters by all rivers borne,
And all the tribute of her secret springs
Cannot avail to change her level bulk,
Or overtop her liminary sands—

But strange it will not seem when well conceived,
For lost in her immensity, they all
Are but a drop to swell the ocean's waste.
Besides, the sun by heat pumps up a part
Superfluous from her stores, since garments wet
Soon yield their moisture to his piercing rays.
How much then must his brooding wings lick up
From such wide-spreading seas! though small his
draughts

From any part, unsummed they are from all.
Then, too, the winds a watery tribute take,
Sweeping the ocean plains; how largely takes
'Tis easy to conceive, since oft we see
The miry ways encrusted in a night.
Besides, I've taught how much in vapor lifts
To clouds, sucked from her oozy bed, and drop
In rain, where winds their dusky freightage bring.
Again, since Earth is porous, and around
Girt by the margin of conjoined seas,
As flow from land the waters to the sea,
So the salt wave insidious glides to land,
Confluent to the source of every stream
That flows a silver thread of waters sweet,
With limpid foot adown her sloped ways.

And now to tell how from the rocky jaws
Of Ætna fires sometimes are seen to burst,
Upheaved in frightful torrents vast; for sure,
From no light gathering of destructive powers

Tempests of fire hang o'er Sicilian plains,
And fearful gaze of neighboring nations draw,
At sight terrific of the heavens on fire ;
Filling with anxious dread their trembling breasts,
What new convulsions Nature may prepare.

Such portents to explain needs must we look
Both wide and deep ; and to the mind recall
How small a part one heaven may be of all—
How infinitely small—as it may be,
One man perhaps to the vast bulk of earth,
Which, well considered—in full truth conceived,
You'll cease to wonder at what now astounds.
For what the wonder if some one of us
Be seized with fever or a burning heat,
Or limbs be racked by any malady !
As oft the foot is sudden puffed with gout,
Or piercing pains invade the teeth or eyes,
Or creeping erysipelas corrodes
The limbs ; truly, because there 're infinite seeds,
And heaven, and earth are full enough for us
Of causes of disease ; and so to Earth
And heaven, causes enough from the Great Whole
May come to them, whence they shall sudden shake ;
And whirlwinds fierce may sweep the sea and land,
And Ætnean fires burst forth and flame the skies,
The wide celestial regions drench in fire ;
And rain storms gather in terrific mass,
When stores of water meet for such result.

Say you the fiery deluge is too great?
Forsooth, what river is there is not great
To him who ne'er has seen a greater; so
The tree, the hill, as yet no greater seen
Is deemed immense, though they, with sea and land,
To the Great Whole compared are but as naught.

Now to unfold how fires excited burst
From out Ætnean furnaces. Know, then,
The mountain mined and hollowed is below,
In caverns scooped, high propped with domes of flint;
These all are filled with wind and air; for air
By agitation generates the wind.
The wind by raging motion made to glow,
Makes glow the rocks around; from mineral earths
Strikes out the ardent fire and winged flames,
That, rising, vomit from wide open jaws.
With these hurls rocks of an astounding weight,
Rains glowing cinders round, and rolls thick smoke—
Nor doubt all's due to the fierce powers of air.
Besides, from every part the sea dashes
Its waves against, and from the mountain's roots
Sucks back its tides; since wind the caverned depths
Beneath the sea, as manifest facts declare.
And winds there penetrate that, belching forth,
Roll high the flames ejecting sand and rocks
From boisterous craters, or what we call jaws,
Wide canopying heaven with ashy smoke.

Some things there are in which 'twill not suffice
To name one cause but more ; though one alone
The true efficient be ; if distant thus,
You see a lifeless corse, untold, you may
Suppose he met from various cause his death.
Whether he fell by steel, stiffened from cold,
Was prey to poison, or sunk from disease,
You cannot certain know ; but scan each cause,
That among all the true one may be hit.
So must we do in many a doubtful case.

(The Nile, sole river of Egyptian plains,
Swells in the summer, and o'erflows her fields ;
Whether in summer the north winds that lie
Against her mouths, when the Etesian blows,
Bridle her current and delay its flow.
For, without doubt, gales from the frozen north
Strike adverse to her stream, that takes its rise
In regions far withdrawn, where day divides ;
And from the parched south pours down its tide
'Mid Ethiop tribes—the races tanned by heat.
Or it may be, heaped by opposing winds
And tides, the sands bank her wide mouths, and thus
Forbid the downward rushing of her stream.
Or chance more rain falls at the fountain head
In seasons when the north Etesian gales
Drive to those parts accumulated clouds
In farthest south, and gathered there on hills,
The laden clouds compressed, discharge their stores.

Or the all-seeing sun with softening rays
The current swells, when from Ethiopian mounts
He to the plain sends down the heaped-up snows.

Now I explain the Avernall lakes, and sites
That deadly exhalations breath ; that take
From this their name, since deadly to all birds.
Soon as in flight such region they approach,
Forgetful of the oarage of their wings,
Their feathered sails they drop, and headlong fall
Diffuse, with drooping heads, and necks relaxed.
Such place is Cumæ, near the sulphurous mount
Where smoking currents large from hot springs flow.
Such in the Athenian walls, the citadel
And height with temple of Minerva crowned.
Thither no savory smell from altars heaped
Can lure the wary crow to trust her wing.
Not that as poets tell they dread the ire
Of Pallas, for their fabled watch ; alone
The place pestiferous warns their flight away.
In Syria, too, a spot 'tis said is found
Whose pestilent breath strikes down e'en quadrupeds
That come unwary near ; sudden they fall,
As if to the Manes struck a victim down ;
Though all arises from fixed natural laws.
Then think not here are placed the gates of hell,
Nor that the infernal deities can drag
Hence down, souls to the shores of Acheron,
As the wing-footed deer 'tis said can draw

By strong inspiring of his nostrils broad,
The scaly serpents from their dark retreat!
How wide from truth—by reason how repelled,
Such tales as these, the truth unveiled shall show.

First, I repeat—repeated oft before,
In Earth are found atoms of every form.
Many to man nutritious; many more
That bear disease, and haste the approach of death;
Many to various animals adapt,
As varied natures suit their varied forms.
Much harsh and grating creeps in at the ears,
Much to the nostrils comes offending sense,
While much revolts the touch, or wounds the sight,
Or tortures with offence the taste; while some
Disgust intense, or bitter pangs excite.
Thus certain trees possess a deadly shade
To rack with pain the head reclined beneath;
And on the heights of Helicon a shrub
Is found, whose blossom's smell bears death to man.
Thus in all lands plants multiform spring up,
Foodful or poisonous, to be sought or shunned.
The acrid smell of an extinguished lamp
To nostrils coming, stupefies a man
Subject to fall in epileptic fits.
The fœtid smell of castor overpowers
A woman in the season of her sex;
The rare wrought work drops from her tender hands;
She fainting sinks, if snuffed just then its power.

And many things dissolve the languid limbs,
Jostle the soul within from off her seat.
Thus, if with food replete you sudden plunge
In the hot bath, you there a death may find.
How, too, will charcoal fumes quick penetrate
The brain; take captive life, if not betimes
The body fortified by cooling draughts.
For when the insidious power has seized the limbs,
The pestilent breath comes deadly like a blow.

And see you not how fumes bituminous
Sulphurous and deadly gender in the earth!
What ills the breathing of metallic fumes
Brings upon those who track the hidden veins,
Silver or gold—deep prying in the earth—
What look cadaverous, and what hue they bear!
Have you not seen or heard how soon they sink—
How quickly fail the vital power of those
Whom strong necessity to such work compels?
Since deadly vapors in the Earth ferment,
And when exhaled brood in the open air.
Thus the Avernian the winged fowl involve
In deadly exhalations from the ground,
Empoisoning all that region of the sky.
When thither comes in airy flight the bird,
Seized with a secret bane, shut are his wings,
Down drops to earth the feathered traverser.
Or it may be the strong Avernian steam
Dispels the incumbent air, making a void;

Then fails at once the oarage of their wings ;
No more aloft by their pulsations held,
They headlong fall to earth through the drear void,
While life exhales from every opening pore.

Water in summer time flows cool in wells,
Because the Earth then rarefied by heat,
Its proper stores most radiate to the air.
Hence more the Earth is drained of its heat,
And colder grows the currents under ground.
But when by cold in winter 'tis compressed,
Its heat escaping passes into wells.

Near Ammon's fane a fount 'tis said there is
Whose flow by day is cold, and warm by night ;
Whence greatly wondering men conceive the sun
With sudden power must warm it from below,
When night with dismal shades hath shrouded Earth—
But far from truth such supposition strays ;
For when the sun with fervent rays direct
Lying on the unshadowed plains with power
Of day, warms not the surface waters, how
Could it warm them when Earth is interposed ?
When scarce its heat can penetrate thick walls !
What then the cause ? more porous is the Earth
That girds the fountain than is found elsewhere,
With many elements of heat around ;
Hence when the night o'ershadowed hath the Earth
With its dew-dropping shades, the Earth below

Grows cool around, as 'twere by force compressed,
And to the fountain drains its seeds of heat
That mingling with it warm its liquid flow.
But when the sun with risen rays direct,
With ardent influence rarefies the earth,
The glowing atoms quick resume their seats ;
And hence the spring grows cool along the day.
Besides, the water pierced by solar rays,
And ardency of tremulous light, expands ;
Releasing what it holds of fiery seeds—
As oft it renders up the binding frost,
Dissolves the ice, unknits the rigid bond.

A fount there even is in Dodona
That fires light tufts of tow brought near, that they
Float on the surface an inflamed torch—
Truly because innumerable seeds of heat
Caught in the wave rise with it from below,
Though not of ardency to warm its flow.
Some secret power compels them to burst forth
And to unite ; as the sweet water of
Aradian spring forth gushes in the sea,
And puts aside, around, the bitter wave.
And thus in many places of the wide salt sea
Sweet waters bubble up amid the brine,
Grateful resource to thirsty mariners.
So it may be that seeds of fire concealed
Through that cold fount may rise, and when they join,
Forthwith the torch inflames ; since in itself

The pitchy torch holds many seeds of heat.
For see you not when the extinguished wick
Approaches burning lamp, forthwith the flame
Leaps to it and lights up before 'tis touched—
And many things before the fire attains
Burst into flame when full infused with heat ;
So must we think it happens with the fount.

And now to tell by which of Nature's laws,
The stone called Magnet by the Greeks,—since first
'Mong the Magnesians found,—can iron draw.
Men gaze with wonder on the marvellous stone,
With pendent chain of rings, oft five or more,
Light hanging in the air suspensive, while
One from another feels the influence of the stone,
That sends through all its wonder-working power.
Here many principles we must first lay down
And slow approach by long preparative,
Rightly to solve the rare phenomenon.
The more exact I then attentive ears.

First, from all things that are to sight revealed,
Bodies corporeal must perpetual flow,
That strike the eye, and sense of vision wake.
So odors flow from things od'riferous,
Congealing cold from ice ; from sun, fierce heat.
While briny vapors rising from the sea,
Corroding, waste the walls along our shores,
And mingled sounds cease not to float in air.

A savor salt comes to us near the sea,
And bitter flavor where they absinth bruise.
Thus from all things thronged emanations flow—
Unintermitted from all sides must flow,
Since always we perceive, and smell, and hear.

Now I recall what in my early verse
Established was, that all contains a void.
Truth pertinent to much, but most required
In such discussions as now claim our care—
That all sense knows is body mixed with void.
For see in caves the hanging rocks above
Sweat moisture, and distil the frequent drops ;
See perspiration from our bodies pour,
Beard push, and downy hair invest the limbs.
See food diffused through veins, nurture and build
Our bodies' extreme parts, e'en to the nails.
See heat and cold free permeate the cup—
Silver or gold—held brimming in the hand.
Sounds traverse rock-built walls ; fleet odors float
In air ; through all the nipping cold pervade—
While heat subduing, penetrates e'en steel.
Though girt our body round with mailed coat,
Yet fierce disease will make its way within.
Tempests and storms that in the air have birth—
Or in the Earth—through Earth and air disport ;
Since all's with penetrable tissue wove.

And furthermore, the emanations are

Not like endowed, nor act alike on all.
The sun that indurates the cloddy earth
Dissolves the ice ; and from the lofty hills
Its thawing rays bring down the piled-up snows,
And melt the wax exposed to its blaze.
The heat, that liquefies iron or gold,
Hardens and shrivels up all flesh and hides.
Water, that hardens steel plunged from the fire,
Softens the leather hardened by the fire.
The olive wild, than which no tree to man
Bears bitterer fruit, the bearded goat delights.

Here further truth must be premised, ere we
Attempt to solve magnetic properties.
All varied things are penetrated by
Unnumbered pores, differing in all ; and thus
Each its own nature has and passages :
Hence various senses animals endow,
And each perceives its own appropriate thing ;
And diverse come, or sound, or taste, or smell.
Besides, some things are seen to pass through rocks ;
Some traverse wood, or brass, silver or gold,
While some a glancing passage have through glass.
Here darts an image, and there passes heat,
As is determined by the winding cells.
The inner structures and involved pores
Of unlike natures, textures all unlike.

These truths laid down, light labor will suffice

To show the law—unfold the hidden cause
By which the magnet can attract the steel.
First, from the stone innumerable atoms flow,
In streams that form an atmosphere around,
Displacing air between it and the stone.
Thus rarefied, the space, the particles
Of metal press, vacated place to fill,
And drag with them the mass to which they 're joined ;
For nothing is than steel more closely knit,
Nor more compacted in its elements :
Hence, little wonder, if, as said before,
The particles thus streaming to the void
Should drag with them along the chain entire !
And this they do ; drag it to magnet stone,
Whereto it close adheres by secret bond.
And this on every side occurs—above,
Below, transverse—where'er a void is found,
Immediate atoms stream into the place,
Since on all sides they are by impulse urged,
Nor can themselves rise vapor-like in air.
And add to this what more the motion aids,
The ring of air thus rarefied in front,
Space thus despoiled behind ; straight follows that
The rearward air propels it from behind ;
For air encompassing, beats perforce on all,
And moves the stone, since on one side a void
Is open wide its substance to receive.
And this same air-light, subtle minister,
Insinuate through pores, impels the steel

As drives the wind the sail distended ship.
Besides, all bodies must within hold air,
Since they are porous, and air all surrounds.
The air thus hid within the iron mass
Is ever with a tremulous motion urged,
Hence with internal impulse drives the ring
Toward the void, for there its efforts tend.

Sometimes the steel starts sudden from the stone ;
Sometimes 'tis wont to fly, and then pursue.
As you may see, the rings of Samothrace
Leap up, and flings in a brazen cup
Dance when magnetic stone draws near below,
With seeming longing struck to fly the stone,
The tumult caused by interposed brass.
Since radiant brazen emanations first,
Coming seize on the iron's open pores ;
Follows thereon magnetic tide, and finds
Preoccupied the space ; hence cannot flow
Free as before through pores ; thence 'tis its waves
Beat 'gainst the iron's substance, and repels,
Acting on it through interposed brass—
Repels what else its nature would attract.

Nor need you wonder that magnetic tides
Act not on other things ; for some there are
Held fast by weight, as is the ponderous gold.
And some of such attenuate and thin
Consistency, they lend its waves no hold.

Such is the porous wood ; while iron holds
An intermediate form, well-fitted thus
To own the influence of magnetic powers.
Nor are such facts without analogy ;
For many things like adaptation show.
The rocks by lime alone cemented are ;
And wood close joined with the adhesive glue,
That sooner will the plank its substance part
Than yield the joint knit with the glutinous bond.
How coalesces, too, water with wine,
Which yet stiff pitch and the light oil rejects.
The sea-shell's purple juice merges with wool,
So with its substance joined 'twill not depart,
Though washed it were in all the ocean's waves.
One thing alone silver and gold cements ;
And brass, by pewter, may be joined with brass.
And many such like cases could I cite ;
But for what end ? For sure, befits it not,
To weary you with tedious details,
Nor me to wear out time on single theme,
But briefly much in fewest words embrace.
Those then whose textures correspondent are,
As the projecting to those mined with holes,
Are closest joined and most compactly knit ;
While some are interlocked with rings and hooks ;
As seems the case of iron with the stone.

And now I tell whence dire diseases come ;
How pestilence, marshalled in deadly power,

Bears death upon its wings to man and beast.
First, then the air teems, as I've taught, with seeds
Divers, some favoring life, but many more
Fraught with disease and death; chance gathered, these
Infect the sky, malignant make the air—
For pestilence dire, and all diseases' power
Come from afar through air, a deadly breath;
Or a miasma rises from the ground,
Where stagnant waters mantle and ferment
In noisome pools under the brooding sun.

And see you not how, tried by change of sky
And water, those who wander far from home?
So great in them is their diversity!
How differs Britain's clime from that which hangs
O'er Egypt, where the Earth's great axle slopes!
How eastern Pontus, and Gades the west,
From burning regions of the tawny tribes!
As the four quarters differ of the world,
Under four winds and aspects of the sky,
So differ men in color and in traits.
So differ, too, the thick troops of disease;
Thus leprosy has birth in Egypt, on
The banks of slimy Nile, and no where else.
The joints with gout in Attica are racked;
Sight suffers most in Achia; and thus
Each place is hostile to some limb or part,
As varied are their shadowing sky and clime.

When, where'er bred, the dire malignancy
Glides gradual, mist-like, with a noiseless foot,
Corrupting all the air with tainted breath,
And reaching us, it hostile makes our sky.
Then sudden sinks a pestilential power
Upon the waters, and upon the fruits—
The food of man; the pasturage of beasts;
So hangs in air, the pestilence drawn in
At every breath, and glides to seat of life.
In the same way, the deadly murrain comes
With devastation on the bleating flocks.
Nor matters it whether we bear ourselves
To adverse climes, and change our shadowing sky,
Or whether Nature unaccustomed airs
Brings sudden on us with malignant breath;
In both we walk encompassed with death.

Such the disease—such the death-bearing gales
That erst funereal made Cecropian plains,
Depopulous her towns—her streets desert.
Coming from Egypt's borders far withdrawn,
Wide regions traversing of flood and air,
It camped at length under Athenian walls,
And gave her citizens in troops to death.
The eyes were blood-shot with suffused glare,
The throat's recesses black exuding gore,
The voice's passages with ulcers clogged;
The tongue, the mind's interpreter, sweat blood,
With sufferings unstrung, slow-moving, rough to touch.

When through the throat congested was the breast,
The poison soon o'erflowed the sufferer's heart.
Then sunk at once each barrier and defence,
And all within the intricate wards of life
Gave way. The breath cadaverous comes as when
Projected corse with fœtor loads the air.
Prostrate at once the mind and living powers,
The body languished in the jaws of death ;
Anxious distress the while—complaints with groans
Attendant on insufferable ills.
Convulsive hiccoughs through the night and day,
Unintermitting, seized and racked the limbs ;
Upon the surface no excess of heat
Could be perceived ; warmth only to the touch,
As when Erysipelas corrodes the limbs ;
Within, the fever to the vitals raged,
And to the bones, and like a furnace glowed.
No covering—not the lightest could the limbs support ;
Cold and fresh gales ever un'vailing sought.
Many, their limbs on fire with the disease,
Would cast their bodies naked in the wave ;
While many, rushing with wide-gaping mouths,
Leaped headlong into wells and steeped therein,
While thirst, with cravings unappeasable,
Made largest draughts no better than the least.
No respite found ; the weary bodies lay,
Victims of ills irremediable, while
The vanquished physician with his idle art,
Muttered low doubts, or silent stood through fear.

Unvisited by sleep through the long night,
Their blood-shot eyes in burning sockets rolled.

Then many signs precursors were of Death,
That stalked at large with frightful images.
The conscious mind with anguish tossed, and fear,
Knit eye-brows with a fixed, delirious look;
The tortured ears besieged with horrid sounds;
The breathing quick, or loud and slowly drawn;
A clammy sweat glistened about the throat;
The scant saliva thick and saffron tinged.
A labored cough forced through rough parched throat,
Hands ceaseless twitching, and convulsed the limbs;
An ominous cold crept upward from the feet
By slow degrees, till neared the fatal hour.
Nostrils compressed, pointed and sharp the nose,
With hollow eyes, sunk temples, rigid skin,
The thin lips set in fixed, ghastly grin,
The forehead tense and swollen, till at length
They stiffened lay in death; with the eighth sun
Or with the ninth they yielded up their life.
Or, if the sufferer 'scaped so prompt a death;
The plague, bursting in horrid ulcers and
In foul discharges, brought his doom consumptive—
When the corrupted blood from nostrils flowed,
With it flowed too the sufferer's strength and life.
Or if relief was found from such outflow,
The dire disease straight fell on nerves, or limbs,
Or genitals; and some fearing to face their fate,

'Scaped by their sacrifice to trenchant knife ;
Some held on life with loss of hands or feet,
Or loss of sight ; seized with such dread of death ;
Some lived, their conscious memory effaced,
The past forgot, not knowing e'en themselves.

Though corpses piled on corpses on the ground
Unburied lay, no bird or beast of prey
Ventured approach ; or if they touched they died ;
For in those dismal times no bird was seen
To wing the air ; no beast that wons in wilds,
Night-prowling dared to creep from covert woods.
Unnumbered, struck with pestilence they died—
And chief the faithful dog, sharer with man
In ill, infected lay along the public ways,
Till from gaunt limbs disease wrenched out their
lives.

Vain all appliances that sought relief ;
For what to some prolonged a failing life,
To others prompt destruction deals and death.

And what in scenes so piteous and so sad,
Most sad and piteous was—all those attacked,
With prostrate souls and hearts desponding lay
Waiting for death, as if already doomed,
And unresisting yielded up their breath.
And further this, that at no time they ceased
To take the contagion of the gaunt disease,
Like woolly flocks, or stricken horned kine.

And this it was most heaped death upon death ;
For all the while the dire contagion spread,
Nor ceased its dreadful tread from victim felled
To other victim fated to like fall.
E'en those who, basely loving life too well,
Fled craven from the sight of stricken friends,
Soon wailed, deserted, void of help and care,
Their base and brutal selfishness—they died
The death of brutes, forlorn of hope—and those
Whose prompt alacrity the danger braved,
Who ruled by love and duty, or constrained
By tones of suffering and the low complaint,
Stayed by the sick to minister relief,
Took the contagion in their work humane.
Thus sunk the best, long struggling, but compelled
To add another to their buried dead ;
They to lone homes returned, worn out with grief,
And filled with anguish sank upon their beds.
None could be found in that so direful time,
Whom neither loss of friends, or fell disease,
Or sympathizing grief, had caused to mourn.

Shepherds and herdsmen were struck down alike ;
The sturdy ploughmen in their narrow huts,
Huddled and packed their limbs in noisome lairs,
Yielded to death from poverty and disease.
Here might be seen in ghastly groups around,
The lifeless parents sunk on lifeless sons,
Their children lying on dead parents die.

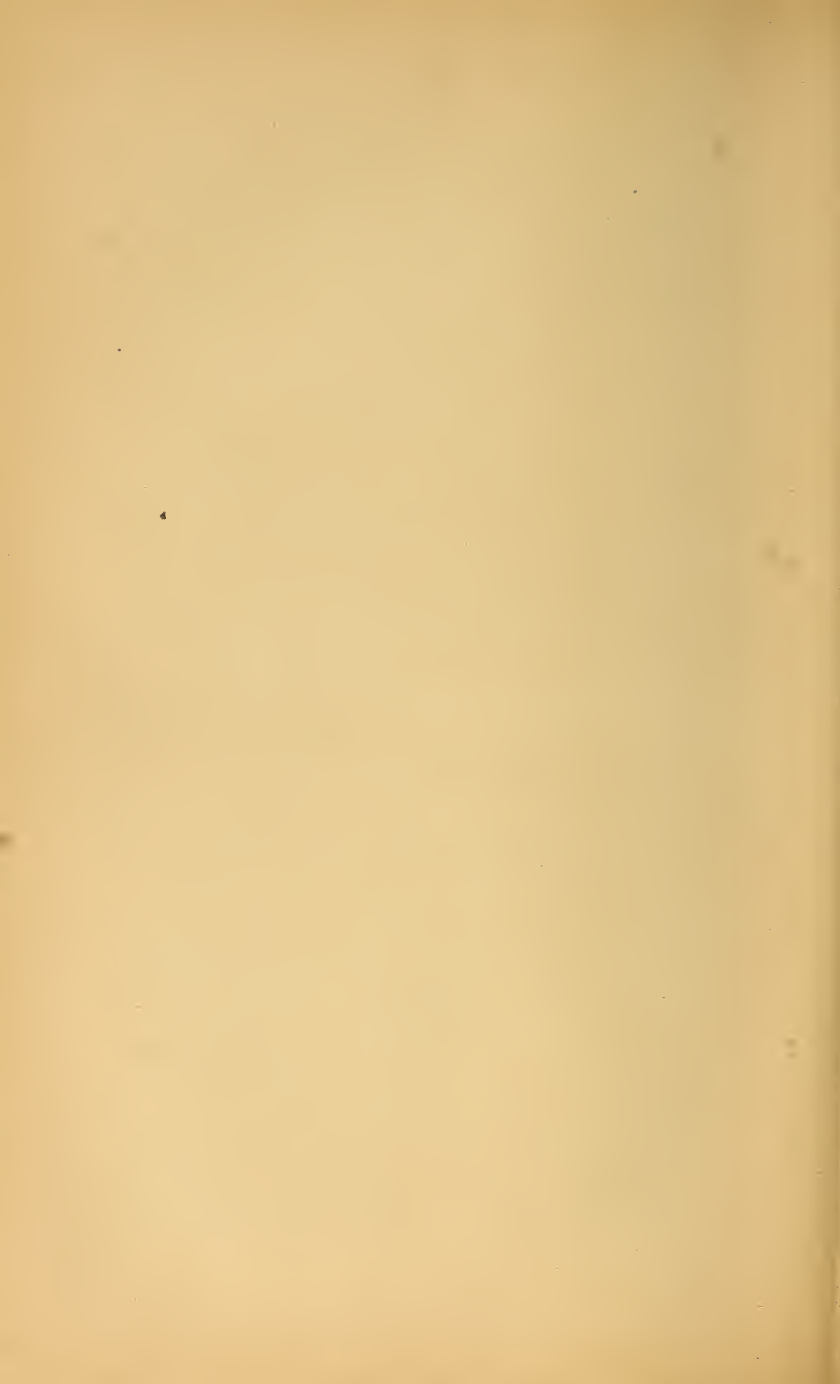
And what new aggravation brought was this :
All the afflicted streamed from fields to town—
The stricken crowds of husbandmen poured in,
Assembling the disease from every side,
They filled all buildings, streets, and squares ; and
more

They gathered, more death piled in heaps.
Many, devoured by thirst along the ways,
Dragged squalid bodies to the water-pipes,
And died through madness of excessive draughts.
And many might be seen in streets and squares,
Horrid with filth and covered up with rags,
Perish by slow degrees, till naught but skin
Hangs on their wasted frames, while green gangrene
And mining ulcers eat what was the grave's.

And now, by strangers thronged, the shrines of
gods,
Made hospitals, with corpses were defiled,
And all the temples stood heaped with the dead.
Religion knew no sanctity ; no god
Received a vow ; impending grief o'erpowered
All former feelings, habits, and regards—
No decent rites of sepulture remained
In the doomed city as before was wont—
Short funeral trains contentious crowd the ways ;
The population terror-stricken quailed ;
Each mourner as he could buried his dead ;
While horrid urgency and want impelled

Some to revolting violence and wrong ;
Rather than leave their dead deserted, they
With dismal cries hurried their kinsman's corse,
To pile for others reared, and torch applied ;
Whence bloody frays arose, and fights and brawls
Usurped the place of reverential rites.

END OF BOOK VI.



NOTES.

NOTES.

BOOK I.

Page 35.

“Mother of Romans! joy of men and gods!”

MOST readers of this opening address must have been struck with its curious contrast with the poet's philosophical principles. The intense earnestness of the language,—the words plain and simple in themselves, yet instinct with life and passion, makes us feel that it is something more than an impersonation of the active energy of Nature. If the poet began with such an intention, his headstrong Muse got the better of his philosophy and compelled him to follow her guidance. This, perhaps, is his best defence, if defence be needed. Montaigne (Essay iii. 5) has well conceived the characteristic features of this passage. Quoting its most vivid expression, he says he is disgusted with the point and verbal allusions that have since prevailed. How tame Spenser's elegant paraphrase (Fairy Queen, B. iv. C. 10) and Dryden's translation are by the side of the original.—MUNRO.

Lucretius, though more free than any other ancient writer from the direct influence of religious traditions, yet his thoughts are shaped by the same imaginative impressions as gave birth to the old mythologies. In this address to the vital powers of Nature, he is under the influence of these associations. In this invocation there is a combination of poetical illustration, of symbolical representation, and sincere conviction. There is in it an acknowledgment of a living power independent of and superior to man, and to which man, as all other creatures, is subject.—SELLARS.

His master Epicurus did not forbid sacrifice and prayer to the gods, though, as has been said, Lucretius prays here not as a philosopher but as a poet.

Page 38.

*“I fear lest you perchance should think
I'm entering on the elements of vice.”*

It is interesting to observe that the relation of physical inquiry to religious belief agitated in modern times, and which has risen into greater prominence in connection with the increased study of Nature, had its parallel in

ancient times, when objections against such inquiry were urged on the ground of its impiety, as we see in such passages as this.—SELLARS.

Page 38.

“ She falls a victim by a father’s hand.”

This may be compared with a passage in a celebrated chorus in the “Agamemnon” of Æschylus, where the same subject is treated; though we find here very slight, if any, traces of imitation.

Page 39.

“ Whether born with us, or infused at birth.”

Two theories of the origin of the soul: the true one, that it is born with the body; the false one, that it enters the body at the body’s birth. Three theories of the soul after death: First, the true one, that it dies with the body. Secondly, the false one, that it enters Orcus. Thirdly, the equally false one, that it migrates into some other living creature.

Page 40.

“ Those terrors, and that darkness of the mind.”

These terrors must be dispelled by a knowledge of Nature, whose first principle is, that nothing can be produced from nothing by divine power. Aristotle again and again declares this to be common to all physiologists. These verses are repeated in the 2d, 3d, and 6th books, and form in fact the key-stone of Epicurean philosophy.—MUNRO.

Page 41.

*“ For if from nothing anything could spring,
All living things we see might take their birth
Indifferently from all.”*

This, from the nature of the case, is rather a full statement of what he means by “nothing can come from nothing,” than a proof; his theory of fixed, unchangeable seeds of things or atoms, he subsequently demonstrates with masterly clearness and power. Some of his arguments even Newton seems not to have disdained to borrow.—MUNRO.

Page 45.

“ Although the showers that Father Ether pours.”

From the Vedas to the “Pervigilium Veneris,” poets and philosophers

love to celebrate this union of ether and earth : ether as the father descending in showers into the lap of mother earth. The notion naturally had birth in warm climates, such as India ; where the excessive heat at stated periods seemed to bring the ether down in abundant rains, which at once quickened all things. This notion, too, has induced Lucretius, here and elsewhere, to forget or suppress for the moment his calm, cloudless, unsullied ether, and confound it with this upper generator of heat and rain.—MUNRO.

Page 45.

“ From one’s destruction builds another up.”

Lucretius is fond of this doctrine, that the destruction of one thing is the birth of another, and that the uniformity of Nature is thereby maintained. He doubtless had running in his thoughts the old dogma of the physici, more than once asserted by Aristotle, that the destruction of one was the birth of another.

Page 51.

*“ All Nature of two essences consists,
Matter and void.”*

All the philosophers of the fifth century B.C., prior to Socrates, inheriting from their earliest poetical predecessors the vast unmeasured problems which had once been solved by the supposition of divine or superhuman agents, contemplated the world, physical and moral, all in a mass, and applied their minds to find some hypothesis which would give them an explanation of this totality, or, at least, appease curiosity by something which looked like an explanation. What were the elements out of which sensible things were made? What was the initial cause or principle of those changes? Was it generation of something integrally new and destruction of something pre-existent, or was decomposition and recombination of elements still continuing? The theories of the various Ionic philosophers, and of Empedocles after them, admitting one, two, or four elementary substances, with Friendship and Enmity to serve as cause of change or motion ; the Homœomeria of Anaxagoras, with Nous or Intelligence as the stirring or regulating agent ; the Atoms and Void of Leucippus and Democritus,—all these were different hypotheses answering to a similar vein of thought. All these, though assuming that sensible appearances of things were delusive, were, nevertheless, borrowed more or less directly from some of these appearances, which were employed to illustrate and explain the whole theory.—GROTE, *History of Greece*, viii. 341.

After men had for a long time, in accordance with the earliest ideas of

the Hellenic people, venerated the agency of spirits embodied in human forms, in the creative, changing, and destructive powers of nature, the germ of a scientific contemplation developed itself in the physiological fancies of the Ionic school. The first principles of the origin of things, the first principle of all phenomena, were referred to two causes: either the concrete material principles, the so-called principles of Nature, or the processes of rarefaction and condensation.

The hypothesis of four or five materially differing elements, which was probably of Indian origin, has continued, from the era of the didactic poem of Empedocles down to the most recent times, to imbue all opinions on natural philosophy—a primeval evidence and monument of the tendency of the human mind to seek a generalization and simplification of ideas, not only with reference to the forces, but also to the qualitative nature of matter.

In the later period of the development of the Ionic philosophy, Anaxagoras advanced from the postulate of simply dynamic forces of matter to the idea of a spirit independent of all matter uniting and distributing the homogeneous particles of which all matter is composed. The world-arranging Intelligence (*νοῦς*) controls the continually progressing formation of the world, and is the primary source of all motion, and therefore of all physical phenomena.—HUMBOLDT, *Cosmos*, iii. 9.

Page 51.

“An essence third to these is nowhere found.”

Lucretius affirms that nothing exists but matter and void; and undertakes to show that every fact in the world can be explained by the properties of matter, and that matter itself may be conceived as possessed of very few simple properties, from the combination of which the complex facts we see may follow. Of course, he fails to do this; but if the proposition be restricted to what are called physical phenomena, it becomes, if not certainly true, nevertheless an hypothesis well worthy of consideration and not yet proved false. Lucretius admits no subtle ethers, no variety of elements with fiery, watery, light, heavy principles; he does not suppose light to be one thing, fire another, electricity a fluid, magnetism a vital principle, but treats all phenomena as mere properties or accidents of simple matter.—*North British Review*, March, 1868.

Page 52.

“Time in itself exists not.”

Time, says Bacon, is the great innovator; but, as Whateley observes,

though this is a convenient and allowable way of speaking, *effects* are produced not *by* time but *in* time. In reality, says Coppleston, "time does nothing and is nothing; we use it as a compendious expression for all those causes that operate slowly; but unless some positive cause is in operation no change takes place in a thousand years." Out of the physical laws of nature, and the operation of the brute creation, there is no agent but man.

Pages 54, 55.

*"Primordials, strong
In their simplicity, eternal are."*

Two opinions have prevailed from the earliest times respecting the constitution of body: that which supposes its entire homogeneousness, and that which regards it as consisting of material parts or atoms separated by void spaces, these parts being indivisible. The last is the doctrine of Democritus and Epicurus; and, in modern times, of Bacon, Newton, and Dalton. Newton, near the end of his Optics, thus expresses himself: "It seems probable to me that God in the beginning formed matter in solid, massy, hard, impenetrable, movable particles, of such sizes and figures, and with such other properties and in such proportion to space, as most conduced to the end for which He formed them; and that these primitive particles being solid, are incomparably harder than any porous bodies compounded of them, even so very hard as never to wear or break in pieces." He says again further: "All bodies seem to be composed of hard particles—even the rays of light—and, therefore, hardness may be reckoned the property of all un-compounded matter." And further may be quoted in illustration of Lucretius: "While the particles continue entire, they may compose bodies of one and the same texture in all ages; but should they wear away or break in pieces, the nature of things dependent on them would be changed; and therefore, that Nature may be lasting, the changes of corporeal things are to be placed only in the various separations and new associations and motions of these permanent particles." His particles agree in every point with those of Lucretius, except in attributing to them different densities and forces.

The constancy of all phenomena is an unanswerable argument as proving the existence of some inalterable basis of matter. Unless there be something indestructible and indivisible in sodium, how could it retain every physical property of sodium? so that, for instance, when glowing with heat it shall continually ring out, as it were, the same note of light, imparting vibrations that paint the well-known double yellow line in the spectrum. All men of science believe, consciously or not, in atoms indivisible and indestructible.

Page 56.

“Moreo’er, since there’s an extreme part of that.”

A passage necessarily obscure, because dealing with one of those questions which utterly elude the grasp of human reason. Epicurus, building up his dogmatic system, and hating all scepticism on first principles, determined that his atoms should have size, shape, weight, and therefore extension. But if extension, then parts: but how can that which has parts be indivisible? This is the question which Lucretius here answers. He seeks to maintain at the same time that cardinal point in Epicurean physics, that atoms are impenetrable and indestructible, and yet possessed of weight, shape, and extension, and to show how particles thus endowed are incapable of further division. Atoms have parts, but these parts are *minima* not able to exist alone; abiding therefore in the atom from all eternity in unchangeable juxtaposition.

Mr. Munro thus clears up the doctrine held by Lucretius, which has been grievously misunderstood. He quotes in further illustration from a great philosopher, Henry More, on the immortality of the soul, Preface. “I have taken the boldness to assert that matter consists of parts indiscerptible, that is, particles that have indeed real extension, but so little that they cannot have less and be anything at all, and therefore cannot be actually divided; they are divisible only intellectually; it being of the very essence of whatever is, to have parts or extension in some measure or other; for to take away all extension is to reduce a thing only to a mathematical point, which is nothing else but pure negation or nonentity. It is plain that what is intellectually divisible may yet be indiscerptible. Indeed, it is not only possible, but it seems necessary it should be true.” One of the latest and best teachers (Birks on Matter and Ether, iii. 31) defines atoms as the dual particles of matter and ether, combined inseparably, which constitute the first or ultimate elements of all ponderable substances; these by their dynamical action produce the effects of Epicurus’ statical atoms.—MUNRO.

The mystery is as great to-day as it was in the age of Lucretius. In truth, it may be said that we know nothing of the ultimate constitution of matter—the atom itself is a pure assumption. Still, the latest researches of science into the inner mechanism of the atom seem to point to the carrying out of what has been called by high authority (Sir William Thompson) the grand conception of Lucretius, that all phenomena are mere properties or accidents of simple matter.

Page 56.

*“Primordials, then, solid and single are,
Compacted of those close-cohering parts.”*

The description of the Lucretian atom is wonderfully applicable to the

chemical atom, the existence of which, already quite a complex little world, is highly probable. We are not wholly without hope that the real weight of each atom may some day be known, and their number in each material; that the form and motion of the parts of each atom, and the distance they are separated, may be calculated; that the motions by which they produce light, heat, and electricity may be illustrated by exact geometrical diagrams; then the motion of the spheres will be neglected for a while, in admiration of the maze in which the tiny atoms turn. Yet when we have found a mechanical theory by which the phenomena of inorganic matter can be mathematically deduced from the motion of materials endowed with a few simple properties, we must not forget that Democritus, Leucippus, and Epicurus began the work; and we may even now recognize their merit, and acknowledge Lucretius not only as a great poet, but as the clear expositor of a very remarkable theory of the constitution of matter.—*North British Review*, 1868.

Page 57.

*“What difference, then, between the small and great.
The universal whole and its minutest part
Would equal be.”*

Each will alike have infinite parts and by the old paralogism would be equal, because all infinities are equal. Newton, in his second letter to Bentley, admirably refutes the fallacy, giving at the same time its clearest exposition. He says: “I conceive the paralogism lies in the position that all infinities are equal. The generality of mankind consider infinities in no other way than indefinitely; and in this sense they say that all infinities are equal; though they would speak more truly if they should say they are neither equal nor unequal, nor have any certain difference or proportion one to another. In this sense, therefore, no conclusion can be drawn from them about the equality, proportions or differences of things; and they that attempt to do it usually fall into paralogisms.”

Page 57.

“Hence, those who fire the primal matter deem.”

Lucretius, having now established his two great principles of an unchangeable matter and void, before he proceeds to explain by them the nature of things, first, in order to make their truth still more manifest, examines the elements of Heraclitus, Empedocles, Anaxagoras, and other philosophers, and shows their utter inefficiency. Of all these men he speaks with admiration or tolerance, except Heraclitus, whom he assails with a certain passion and violence. Now that the star of the old Ephesian seems again in

the ascendant, such an attack will not meet with much sympathy. The motive, however, is plain enough. In him he is combating the Stoics, the bitter enemies of Epicurus, Heraclitus standing in the same relation to them that Democritus stands to Epicurus. One in the position of Lucretius could only see and criticise a rival philosopher from his own point of view.—MUNRO.

Page 59.

“Belief yielding to sense as proving fire.”

That Heraclitus taught that the senses could not truly discern things is certain; but in what sense he affirmed that the senses could perceive fire, truly, is far from clear. Lucretius could not have affirmed what he does here, without having some expression of Heraclitus to warrant the conclusion. Did Heraclitus teach that the ever-living fire represented motion self-engendered, which in a thousand ways, in the human body and through the whole of nature, produces heat or fire? Compare with this certain late theories of the origin of caloric and the sun's heat; all things else are phases of motion thwarted or turned aside from its natural course. Fire alone gives to sense some apprehension of the real fire and movement at the bottom of all things.—MUNRO.

Page 60.

“Of whom the sage Empedocles is chief.”

Empedocles (flourished 440 B.C.) first broached the doctrine of four elements, in a poem entitled *περι φύσεως*. Lucretius no doubt looked upon Empedocles' poem as in some sense his poetical model, and therefore thought he owed him a debt of gratitude. With many differences, there were also many points of resemblance between their two systems; this especially, that the first beginnings of each were imperishable, and that life and death were but the passing to and fro of elements into things and things into elements. All this being considered, we may grant that his lofty panegyric is justified by the large fragments we possess of Empedocles' chief poem.—MUNRO.

Page 64.

“And now the scheme of Anaxagoras.”

The homœomeria in the philosophy of Anaxagoras (the friend and teacher of Pericles) were the homogeneous elements of the universe. Lucretius seems to denote by the term the relation which existed between the things in being and the particles like in kind of which they were composed. His particles were infinite in number and in smallness; from the nature of the case everything was mixed with everything except only his *νοῦς*. Each individual

thing is what it is, by having in it the greatest number of particles like to it in kind. Lucretius pushes the argument to what he deems the last absurdity—that of endowing first-beginnings with human feelings. Modern philosophers have thought to perceive in the homœomeria theory the germs of important discoveries of cohesion and affinity. Lucretius passes over in noticing this doctrine its main feature of importance, that *νοῦς*—spirit, mind, intelligence—was the first principle of motion.

Anaxagoras assumed, like all Greek philosophers, matter in a state of chaos. But he was the first to perceive that something more was necessary to account for existing things. Cohesion of particles was not sufficient; there must be a combining power. The particles could not themselves be the cause of change in their own position and relations. He clearly announced that at first all things were in chaos till *νοῦς*—Intelligence—set them in order and turned chaos into a universe. He was consequently the first to proclaim, as Cuvier says, that Spirit rules Matter.

Page 66.

“And now, the truth more clearly spoken, hear!”

The poet having explained the nature of his two great principles of atoms and void, and shown the insufficiency of those of rival teachers, he now, before proceeding to apply these principles to explaining the system of the universe, calls attention to his theme in this lofty exordium. He then goes on to show that atoms are infinite in number, and space is infinite in extent. There can, of course, be, properly speaking, no proof of this, as Lucretius has wisely seen. It must, from the nature of the case, be shown by a series of propositions, call them as you please, definitions, postulates, or axioms. These propositions are, however, most clearly put by him when rightly interpreted.—MUNRO.

Page 70.

“Sure not by design, or a prescient cause.”

It is mere blind chance, not Providence, that has arranged out of atoms this world and other worlds. Notwithstanding this denial of Providence, the philosophy of the poem ultimately rests upon the most certain of all our conceptions, that of universal order or law in nature. The idea of law is prior to, and the condition of, all the principles announced in regard to the nature and properties of matter. In reality, the cardinal truth which Lucretius proclaimed was that creation was no result of chance or of a capricious exercise of power, but arose out of certain regular and orderly processes, dependent upon certain primal conditions, of which no further

account can be given. His idea of these ultimate conditions, if less strictly logical, is broader and more vital than a belief either in blind chance or an iron fatalism. A secret power or force, analogous to volition in man, is conceived to be inherent in the primal atom, by means of which creation is able to break from the chains of fate into a more free development. The idea of law in nature, as understood by Lucretius, is not the same as that of invariable sequence or concomitance of phenomena. It implies at least the further idea of power; and this leads up, necessarily though not consciously realized by him, to the wider and higher idea of will; and is in no way inconsistent with the convictions of modern Theism.—SELLARS.

Page 71.

*“And here, my Memmius, guard against belief
Of what some say, ‘that to the centre tend
All things.’”*

It is the Stoics, doubtless, Lucretius here mainly attacks, though the Peripatetics and some others held a similar doctrine. They taught that there was but one finite world surrounded by an infinite void, and that the world was upheld in the way Lucretius here so clearly explains, by all things pressing to the centre. Had Epicurus, while retaining his conceptions of infinite space and matter, and innumerable worlds and systems, seen fit to adopt this stoical doctrine of things tending to a centre, and so to make his atoms rush from all sides of space alike toward a centre, he might have anticipated the doctrine of universal gravity.—See further, note, page 86.

BOOK II.

Page 77.

“And see you not how little Nature craves.”

Epicurus says that the pleasure which was his end was the body free from pain and the mind free from care—that the body should not suffer or the mind be disturbed—that most so-called pleasures only cause bodily pain and prevent genuine pleasure; the absence of pain is the foundation of all pleasure, and a very small positive addition of pleasure will be all that is required. All violent emotion, all care and anxiety was to be avoided, all artificial desires to be controlled as inimical to the tranquillity of the soul. Epicurus denied the power of luxury to give happiness—says that these are

not the things that afford pleasure, but the sole exercise of reason investigating causes why we choose or avoid anything, and banishing those opinions which cause trouble in the soul. When we consider how much misery has been occasioned in all ages by mental delusions, irrational opinions, and blind passions, who will say that there was not great need of such philosophy.

Page 78.

“Relief from pain spreads pleasure in its stead.”

This is the Platonic theory of pleasure and pain—that pleasure is nothing positive, but a mere relation to, a mere negation of pain; that pain is the root, the antecedent of pleasure. Phædon.—Montaigne says our states of pleasure are only the negation of our states of pain; and Kant says pleasure is always a consequence of pain.

Page 78.

“Though in your halls no golden statues bear.”

An ideal description of a Roman palace, adapted from Homer’s description of the gardens and palace of Alsinous in the Odyssey.

Page 79.

“And now, to tell how moving, primal seed.”

He here assumes the inherent motion of atoms as the first requisite in the production of things.

Lucretius finds in *motion* the source of energy or origin of power found in Nature. He assumes that motion is the sole form of energy, and without expressly stating it, that atoms are elastic; the molecules of gross matter are made up of atoms in rapid motion. By this he represented energy. And if this be not universally true, it is probably true for many cases.

Page 80.

“And, like to runners in the Grecian game.”

The well-known metaphor of Plato, from the torch race of the Athenians, who compares the torch to the successive transmission of life from generation to generation. Dugald Stewart applied the same image to the “great lights” of the world by whom the torch of science has been successively seized and transmitted.

Page 82.

“But deem not thou, for this, Intelligence.”

This passage must have been a subsequent addition loosely incorporated, and some verses are clearly wanting. As it stands it has no connection with what precedes or what follows. It is closely connected with the cognate passage in Book IV., where the doctrine of final causes in respect of the bodily organs is so strenuously denied.

Page 84.

“Unseated fall the stars.”

It was the opinion of the ancients that the stars were fastened like nails in the crystal vault of heaven, and, loosened, glided as meteors. Aristotle frequently uses the term “riveted stars.”

Page 84.

“They swerve a little from an equal poise.”

This is the famous doctrine of declination ; without it the atoms would have gone on for all eternity to descend in right lines. The reason for this doctrine will be seen in following notes.

Page 85.

“How could free will in animals exist ?”

Epicurus always passionately maintained the doctrine of free will, in opposition to the everlasting necessity of Democritus and most of the Stoics.

Page 86.

*“But that the mind’s volition is controlled
By no necessity innate.”*

Lucretius assigns the freedom of the will as the chief proof of this third motion ; the natural gravity of atoms gives them, he says, a certain independence and power of resisting extraneous force ; but the mind itself can only escape from inexorable necessity, and acquire freedom of action by this fitful declination of atoms. This theory has naturally enough drawn down on Epicurus the scoffs of his many adversaries. Even his friends have mostly here deserted him. Yet there is something grand and poetical in its very simplicity. He wished, like other thinkers, to derive his system from as few principles as possible ; a sentient first cause was to him incon-

ceivable. This minimum of declination rose before his imagination as the simplest theory which would solve the great problem of being, of the creation of this and all other worlds and all that is in them. What system-monger but somewhere or other reaches a point where reason must be silent or self-contradictory?

It has been ingeniously argued by Le Sage (Berlin Transactions for 1782) that had Epicurus had but part of the geometrical knowledge of, say his contemporary, Euclid, with the conceptions of cosmogony of many then living, he might have discovered the laws of universal gravity; and not only its laws, but, what was the despair of Newton, its mechanical cause. Had he supposed the earth to be spherical, and made his atoms move in directions perpendicular to the surface of a sphere, that is towards its centre, he might not only have proved the law of the inverse square of the distance, but have demonstrated the cause of that law. But the truth is Epicurus might probably have left his worlds to shift for themselves, and let the eternal past time take the place of a first cause, if he had not wanted this theory mainly to explain the great mystery of free will; he wished to mark this as one of the cardinal points of difference between himself and Democritus, whom Cicero praises for choosing to accept fate and necessity, rather than have recourse to such a doctrine as this of Epicurus. It is for this reason that Lucretius dwells at such length and with such emphasis on this part of the question; out of respect to Democritus as well as opposition to the Stoics.—MUNRO

Page 90.

*“Touch, O ye sacred powers—
Touch is the organ whence all knowledge flows.”*

This point is put with emphasis to show the vast importance of touch; for not only nothing can touch or be touched without body, but conversely nothing can be perceived without touch. Touch is, therefore, the body's sense; that is, the sole and only sense whenever the body has any feeling whatsoever. He then enumerates the different ways in which the body can feel.—MUNRO.

Page 91.

“Rise sweet and freshened in the sandy trench.”

Cæsar thus obtained water for his army when besieged on the island at Alexandria.

Page 98.

“Natures divine, by necessary laws.”

That Epicurus and Lucretius firmly believed in the existence of these

gods, is certain. How this immortality and supreme felicity can be reconciled with the rest of their philosophy it were vain to ask, for no answer could be given.

In the verses that follow, "If any choose to give the name," etc., he doubtless points at the Stoics, who carried allegory of this kind to an absurd length. Every part of heaven was parcelled out among the gods and demi-gods, and fatuous derivations assigned to their names by Zeno and other leaders.—MUNRO.

Page 105.

"For see live worms creep from the putrid clod."

This illustration, important from his point of view, he often repeats. Aristotle and the old physiologists seem to accept it as an undoubted fact.

Page 109.

"We all are sprung from a celestial seed."

The first part of this passage is a literal translation from Euripides, a scholar of Anaxagoras. We have already seen the antiquity of the doctrine, probably from the Vedas, that heaven is the father and earth the mother of all things. The whole of the passage is quite Epicurean and consistent with the general argument of Lucretius. What he means to say in his poetical language is this: so far from men and other animals requiring special sensible elements, they, like everything else on earth, come from the mingling of the elements of earth and ether; and at their death these senseless elements return whence they came, to be employed afresh in producing other things.—MUNRO.

Page 112.

"And since the deep-set boundary of life."

The argument seems to be, since all these things are mortal and had a beginning, they must be subject to the same conditions as other mortal things. In fact, Epicurus taught that innumerable worlds were daily coming into being and daily perishing. The book concludes by a contrast between the inefficiency of the gods, who pass a calm time in tranquil peace, and the mighty power of the infinite sum of clashing atoms, now building up new worlds, now slowly, but inevitably, crumbling heaven and earth to dust by the unceasing aggression of their never-ending flood. Already our earth has begun to fail, and can no longer produce what it once did; tillers and vine-dressers spend their labor in vain, and regret the olden time, not knowing that the earth, like everything else, must come to its end.

BOOK III.

Page 119.

"The gods divine in peaceful seats are seen."

This passage is almost a literal translation from the description of the heavens in the *Odyssey*. That Epicurus and Lucretius believed in these "peaceful seats" is certain, but how they are consistent with their general system is as difficult to comprehend as the rest of their firm belief in gods.

Page 123.

"A harmony called by Greeks."

See this doctrine triumphantly refuted by Socrates in the *Phædon* of Plato. It was held by Aristoxenus, a musician, a pupil of Aristotle, and others. They denied that the soul was anything but an empty name—like some modern philosophers who make the soul a series of sensations; Lucretius, on the contrary, held that the soul was a distinct part of, and not a mere state of the body.

Page 125.

*"And now, to tell of what, and how composed
The soul."*

The ingenuity of ancient philosophers was exhausted in attempting to determine the nature of the soul and living principle. There was no one of the elements, except earth, which did not find its advocate in some theory of the soul. It was represented also as a combination of all elements, or as blood, or an intrinsic motion, or a harmony and conjunction of contraries. Aristotle maintained the distinctness of body and soul, as two principles combined without defining what the soul is in itself.—*Ency. Brit.*, art. "Aristotle."

Page 125.

"First, then, it is most subtle and minute."

It is little worth while to controvert the psychological doctrines of our authors; but it may be remarked that the materiality or immateriality of the soul does not in the least touch the question of its immortality. Since, as was said by Locke ("Essay on Human Understanding"): It is evident that He who made us at the beginning to subsist here sensible, intelligent beings, whatever the real nature of the soul may be, can restore us to a

like state of sensibility in another world. Or, according to the Christian doctrine of the resurrection, "After God shall have resolved our sullied manhood into its original dust, he shall gather it up again in a restored purity. Oh kindly and healing death ! which shall refine our mortal flesh to a spiritual body, and make our lower nature chime with the eternal will in faultless harmony !" —ARCHBISHOP MANNING.

Page 128.

"Soul of our soul, the life itself of life."

The consciousness of personal identity, the most important fact in the history of the human mind, establishes it beyond cavil as something distinct from matter. No conceivable refinement of the material theory can account for that great fact of our inner consciousness, by which we exist through life one and the same individual being. That this individuality will continue after death, we have, independently of revelation, proofs drawn from our moral and intellectual constitution. It is only by a future state that harmony can be established in our moral nature—the order of things in this world vindicated—the universe relieved from the imputation of being without a purpose—the great panorama of nature an idle theatre for the transient development of evanescent beings. The more we consider the world, the more, as Rothe observes in his recently-published lectures, do we feel that it has a moral purpose, which moral purpose is only to be sought for in man.

Page 136.

"Oft men by slow degrees are seen to die."

All the arguments against a future state drawn from the intimate connection of soul and body in this life are founded on narrow views of the essential nature of the soul, and regard all mental acts and affections as mere functions of the body, or the resultants of material organization, although there is no correlation between mental and material phenomena. There is in mind an originating principle of action. The mind itself is a primal cause, whereas matter can only act as it is acted on from without. To subject mind to motives, as matter is subject to external forces, to bind it in a chain of necessary causes, while it takes away the foundation of the common notion of moral desert, is to contradict the innate sense of free-will, an ultimate fact of consciousness ; which for us must be regarded as true, or there can be no foundation of rational belief.

Page 147.

"When once the chain of consciousness is broke."

That is, such interruption of our consciousness would destroy our personal identity.—See BISHOP BUTLER, *on Personal Identity*.

Page 148.

"Or suffocate in sweets."

This denotes one mode of burial, that of embalming and laying in a sarcophagus. Though, in the time of Lucretius, burning on a funeral pile and gathering the ashes in an urn was the common method, the other was also practised. The numerous sarcophagi of all ages is a sufficient proof of this. Honey was a principal means of preserving a dead body.

Page 149.

*"And cry 'Alas! No joyous home shall thee
Receive again; nor wife, nor children dear.'"*

"For them no more the blazing hearth shall burn,
Or busy housewife ply her evening care;
No children run to lisp their sire's return,
Or climb his knees the envied kiss to share."

GRAY'S ELEGY.

Page 151.

"Since future must be ever like the past?"

So says the Preacher, i. 9: "The thing that has been is that which shall be; and that which is done is that which shall be done; and there is no new thing under the sun."

BOOK IV.

Page 160.

*"Things then, I say, from off their surface throw
Thin effigies."*

The theory of emanations as the cause of perception was generally adopted by the Greek philosophers. The "*eidola*," *images, spectra*, which play so important a part in ancient and even modern philosophy. It was

supposed that some medium was necessarily interposed between the perceptive agent and the object perceived. The medium was generally supposed to be some emanation from the object; but one theory maintained the doctrine of emissions from the eye. Locke says, *Essay* ii. 8, 12: "Since the extension, figure, number, and motion of bodies of an observable bigness may be perceived at a distance by the sight, it is evident that some singly imperceptible bodies must come from them to the eye.

Page 163.

*"Sometimes a giant shape seems as in flight
To draw a lengthened shadow o'er the sky;
Or monster huge."*

Such appearances seem to have tickled the fancies of the poets. Shakespeare's "Anthony" has all the objects mentioned by Lucretius. "A cloud that's dragonish; a vapor sometimes a bear, or lion, a towered citadel, a pendant rock, etc. His Hamlet, a camel, a weasel, very like a whale, perhaps the very "monster huge" of Lucretius. Wordsworth, *an Ararat, a lion, a crocodile.*

Page 167.

*"In single act
We see a thing, and what its distance is."*

Habit making the whole appear one and the same operation; just as in fact habit makes the seeing a solid object, and the inference that it is solid appear but a single operation. Lucretius seems to have thoroughly felt that distance was not perceived by the eye, but was a matter of mere inference.—MUNRO.

Page 169.

*"For with what slope
They fall, Nature compels them to revert again."*

Very probably he refers to the angle of reflexion being equal to the angle of incidence.

Page 171.

"A wondrous heaven bosomed in the earth."

Shelley beautifully enlarges on this theme:

*"We paused beneath the pools that lie
Under the forest bough,
Each seemed as 'twere a little sky
Gulphed in a world below;*

A firmament of purple light,
Which in the dark earth lay,
In which the purple forests grew
As in the upper air. . . .”

Page 175.

“*Sound and voice*

*Through ear insinuate, there acts on sense
With body.”*

That is manifestly by impulse, the only way we can conceive bodies to operate in, says Locke (Essay ii. 8, 11). What follows has many points of singular agreement with what Lucretius says here and in parts of Book II.

Page 184.

“*Here guard against the folly to believe
That eyes were made to see.”*

This is the doctrine of a modern school of naturalists, who regard all recognition of final causes as a remnant of superstition. It is idle, they hold, to inquire into the object, the end, the why, of organization. Organs do not exist for the sake of an end, but attain that end because they exist. Birds fly because they have wings—wings were not contrived and given them that they might fly. They hold in general that function is a result of organization, not an end to be obtained by it. This is a radical denial of all finality in nature, a denial of pre-existing Intelligence. It substitutes a blind working of nature for an Intelligence working in it, and makes a universal mechanism the only principle, the only cause.

To those who deny a Divine Intelligence this is a forced conclusion—those who refuse to admit a Designer must deny the evidence of design. To recognize in nature traces of a plan of design is already to affirm an organizing Intelligence. To admit final causes is to acknowledge Intelligence as the principle, the origin, and source of all things. All organized beings have their own proper means of life, as numerous in the variations of their mechanism as the stars of heaven. A part of these adaptations we can see, but an infinite number more are beyond our observation. But seeing a part of these designed relations, it is a logical contradiction not to admit at the foundation an organizing Intelligence, as having ordained and established all things. As Newton, after explaining the laws of light, asks if the eye could have been formed without a knowledge of the laws of optics, or the ear without knowledge of the laws of sound.

The research of final causes may not be a safe guide in the investigation

of the facts of nature; they may not be a method of discovery, but they will always remain as the result and conclusion of our study of nature; and the irresistible inference from them of an organizing and presiding Mind, will be little disturbed in the common apprehension of mankind by the introversions of empirical philosophy.

Page 185.

*“Tis easy to believe that things contrived
To minister to purposes of life
Were for their use contrived; but different far
With limbs and organs.”*

Aristotle (*De Part. Animal.*, i. 5, iv. 10), in his brilliant statement on the side of final causes, goes over much the same ground as Lucretius here, and comes to exactly opposite conclusions; he uses the tools made by man as a proof that the tools made by nature had the same end in view—the hand being as a tool for the use of tools; the body and all its parts are made for the functions they perform, as the saw is made for the sake of sawing—the sawing is not done for the sake of the saw.

“We can understand how man creates or constructs consciously and by design, and see if we do not understand how nature by a law calls into being an organic structure, but the intermediate organism which stands between man and nature, which is the work of mind yet unconscious, and in which mind and matter seem to meet . . . is neither understood nor seen by us, and is with reluctance admitted to be a fact.”—JOWETT, *Plato*, i. 650.

BOOK V.

Page 203.

*“That when the dead seem on our sight to rise,
'Tis phantoms only that deceive the mind.”*

So far as the general theory of images is concerned, this point can form but a very small part of it; but morally speaking, to an Epicurean it is the most important of all, as the great end of physics is to free men from religion and the fear of death; hence the earnestness with which Lucretius insists upon it.—MUNRO.

Page 205.

“Which far may ruling Fortune ward from us.”

This comes to the same thing as the “ruling nature” of a previous line, as the Epicurean nature is, at one and the same time, blind chance and inexorable necessity.—MUNRO.

Page 205.

*“The earth, the sea, the sun, the stars, themselves
Are gods.”*

This is directed mainly against the Stoics and their *anima mundi*. But Aristotle and the Peripatetics, whose teaching on these points is notorious, are therefore doubtless joined with the Stoics by Lucretius.

Page 206.

*“Nor can we more believe the sacred seat
Of the immortal gods.”*

That Epicurus and Lucretius believed in these gods, is certain. Nothing can be more distinct and outspoken than the words attributed to Epicurus by Diogenes Lærtius. The gods indeed are, but they are not as the many believe them to be. He is not an infidel (*αθεβηης*) who denies the gods of the many, but he who fastens on the gods the opinions of the many.—MAX MULLER, *Science of Language*, ii. 448.

Page 209.

“Fills all the place around with mournful cries.”

St. Austin changes to bitter earnest the irony of the Epicureans. He says: “Why does he begin life with weeping? Why, as he does not know how to laugh, does he know how to cry? because he has entered on life. Lear (iv. 6) carries the “pathetic fallacy” a step farther, and makes the baby cry, not for his own misery, but for his neighbor’s folly: “Thou knowest the first time we smell the air we wawl and cry. When we are born we cry that we are come to this great stage of fools.” Pliny (*Nat. Hist.*, viii.) takes the same dismal view.

Page 211.

*“And thus the universal parent, Earth,
Is of all things the universal tomb.”*

“The Earth, that’s Nature’s mother, is her tomb,
What is her burying grave that is her womb.”

ROMEO AND JULIET.

“The womb of nature and perhaps her tomb.”

MILTON.

Page 216.

“As the old Grecian poets sung—fabling.”

Of the passage in Book II., which the verse quoted introduces, Mr. Grote says (*Hist. of Greece*, i. 33, n.): “The fine description given by Lucretius of the Phrygian worship is much enfeebled by his unsatisfactory allegorizing.” But this moralizing is the very condition of the existence of such passages as that one and the present. He would not and could not otherwise have written them; and to my mind it is extremely interesting to see his intense love of these seductive fancies, and the struggle between his instincts as a poet and his philosophical principles.—MUNRO.

Page 220.

“Which in this orb prevails, ’twere hard to tell!”

The contempt which Epicurus had for astronomers and other system mongers, and the doctrine he held respecting celestial phenomena, is one of the most curious features of his philosophy. Whatever could be brought to the test of sense and was confirmed by it, was true. All opinions, again, which could not be brought to such test, and at the same time were not contradicted by it, were to be held to be equally true. But to say that the sun and stars move from some one controlling cause, or that celestial phenomena, eclipses, and the like, admit of only one explanation, is an unphilosophical assumption, since they are beyond our power of observation, and there are many ways of explaining them equally probable.

Page 220.

“That Earth in centre of the Universe.”

Lucretius does not tell us what the shape of the earth is; he must have conceived it as presenting a surface more or less flat above and below. He conceived it as forming a sort of organic body with the air; like the human body with which he proceeds to compare it. A Stoic might have argued

that, after all, his mode of supporting his earth in space did not so much differ from theirs; but what he objected to in them was their making the universe finite, which, he argued, could not be held together in an infinite void.

Page 223.

*“ Holds secret stores of hidden fire around
His fulgent head, that darksome lie.”*

This remarkable passage has been thought to refer to the heat-bearing non-luminous rays that form, as we now know, so important a part of the sun's radiation.

Page 227.

“ Why, boldly confident, affirm the one.”

The reasoning here is much the same as in the preceding sections; any of these theories may be true, and as none can be proved not to be true, none being opposed to sense, all are equally true; any one, therefore, may afford that legitimate calmness the attainment of which was the end Epicurus and Lucretius had before them, and not the vain ambition to propagate idle mathematical or other theories.—MUNRO.

Page 228.

“ While, through the long cone of the darkened shade.”

Considering what Epicurus' and Lucretius' conceptions were of the shape of the earth, they must surely have blindly accepted from astronomers the fact of its conical shadow.

Page 231.

“ How must have perished then unnumbered tribes.”

This looks like a faint poetical anticipation of the theory of “natural selection.” Those only survive who are the best fitted to the conditions on which their existence depends. The “survival of the fittest” is a truth which readily presents itself to any one considering the subject, and the converse, the destruction of the least fit, was recognized thousands of years ago, as we see in our present passage. Yet it is only of late that it has been brought prominently forward, by a distinguished naturalist, and made the ground of the widest speculation and, it would seem, of much unwarranted inference.

Page 235.

“ And purple haws that winter blushing shows.”

At the present day, in December, you may see large tracts of the Peloponnesus covered with the arbuté trees laden with their bright scarlet fruit.—MUNRO.

Page 238.

“ Nature impelled their tongues to varied sounds.”

He now comes to a question much agitated among philosophers, whether names are natural or given arbitrarily. Epicurus held that they were natural, as explained by Lucretius here. Plato, in the *Cratylus*, appears to have agreed pretty nearly with Epicurus and Lucretius. Democritus and Aristotle seem to have held the contrary opinion.—MUNRO.

What is the result of recent speculations about the origin and nature of language? Like other modern metaphysical inquiries, they end at last in a statement of facts. In the psychological, or historical, or physiological study of language we may find an inexhaustible mine of inquiry into facts. But we hardly seem to make any nearer approach to the secret of the origin of language, which, like some other great secrets of nature—the origin of birth and death, or of animal life—remain inviolable. The comparison of children learning to speak, of barbarous nations, of musical notes, of the cries of animals, afford great assistance in the analogies of language, but throw no light upon its first origin. That problem seems to be irretrievably bound up with the origin of man; and if we ever know more of the one, we may expect to know more of the other.—JOWETT, *Plato, Intro. to the Cratylus*.

Page 243.

“ In earliest times the dying races saw.”

Lucretius means to say that all these sensible impressions of the form, size, and beauty of the gods are true, even that of their immortality. It is only the mental inferences added to these impressions that are false, that of their power and strength and providence.—MUNRO.

Page 245.

“ For when we lift our eyes.”

It is true piety not to perform these ceremonies, but to have a mind at ease; for it requires great strength of mind and a knowledge of the true being of the gods, not to be overpowered by the grandeur and terror of nature.

Page 246.

“A power unseen thus crushes human things.”

Bayle (art. *Lucrece*) accuses Lucretius of gross inconsistency in speaking of this “hidden power,” when at the same time he attributes all things to the necessary movement of atoms, “cause qui ne sait où elle va ni ce qu’elle fait;” but this very “cause” is the hidden power. It is true that as far as form and expression are concerned there is a struggle between the poet’s imagination and the philosopher’s creed. Lucretius is here speaking, of course, generally; but it is not unlikely that his fancy may have been caught by reading of some striking disaster of this kind, such as that of M. Claudius Marcellus, who perished in this way just before the third Punic war.—MUNRO.

Page 247.

“The ductile stream of gold, silver, or lead.”

Milton (*Par. Lost*, xi. 565) has imitated all this passage:

“Two massy clods of iron and brass
Had melted, whether found were casual fire
Had wasted woods on mountains,” etc.

BOOK VI.

Page 258.

“Unfolding the true good, the aim of all.”

The *summum bonum*, according to Epicurus, consisted in health of body and untroubled peace of mind. Pleasure was the end of a happy life. But he, like Lucretius, goes on to explain that when he says that pleasure is the end and chief good, he does not mean what the ignorant and malevolent allege that he does, but not to suffer pain in body or trouble of mind.

Page 259.

“And ignorance of causes them compel.”

The ignorance of the causes of great natural phenomena was a fruitful source of superstition; hence he goes on to explain thunder-storms, volcanoes, earthquakes, etc. The argument for the practical purposes contemplated by the author is complete; but the continuity of the argument is

sometimes broken, and the mass of materials in this and in the preceding book is not brought into harmony with the plan of the work. Certain unfinished parts, and the not unfrequent repetitions, show that the work did not receive his last touches, while the highly finished introductions show how carefully and artistically the whole work was planned.

Page 278.

“ And once in Ægium.”

He alludes to the famous earthquake of B.C. 372, which swallowed up Helice and Bera, and ten Lacedæmonian triremes anchored off the coast. He mentions Ægium, as it was in his time the chief city of Achaia, and near the two in question.

Page 278.

“ How then do smitten populations quake.”

He loses no occasion of reminding us how great the delusion of many is in supposing that our world is eternal. This he has before refuted at great length. Our world and every other world will perish, as certainly as the universe will be immortal and unchangeable for ever.—MUNRO.

Page 281.

“ Roll high the flames ejecting sand and rocks.”

Lucretius shows here his habitual accuracy of observation and vividness of description. All the principal features of an eruption are brought into clear relief.

Page 287.

*“ As the sweet water of
The Aradian spring.”*

Aradus, an island on the coast of Phœnicia; this fountain was very famous; it is said to be in use at the present day. Similar springs are mentioned in other places.

Page 288.

*“ The stone called Magnet by the Greeks,—since first
'Mong the Magnesians found.”*

Magnesia was a region in Lydia, of which the inhabitants were called Magnetes or Magnesians; and from them, according to Lucretius and others, the magnet was named. He dwells on the magnet at what seems

so disproportionate a length, because the phenomena seemed to him to illustrate so many of his first principles.

Page 292.

“Acting on it through interposed brass.”

Lucretius is here completely mistaken from too hasty induction; the action of the magnet is not sensibly affected by the interposition of any body which is not sensibly magnetical; nay, it works equally well in a vacuum. This, by the way, overthrows the poet's argument, where he brings in his favorite air to assist in explaining the attraction between the loadstone and iron. But if Lucretius has failed in solving the mystery no one seems to have succeeded.—MUNRO.

Page 295.

“Such the disease—such the death-bearing gales.”

The poet, wishing to illustrate what he has laid down as the causes of disease, concludes his poem with this description, which is an imitation, in many parts a close translation, of Thucydides, ii. 47, 54. One would infer from the words of Lucretius that he had no practical or scientific knowledge of any such like form of disease. He is content to take on trust whatever the historian says, and more than once misapprehends or misinterprets his words. I have looked into many professional accounts of this famous plague; the writers, almost without exception, praise Thucydides' accuracy and precision, and differ most strangely in the conclusions they draw from his words. I can name physicians, English, French, and German, who, after having examined the symptoms, have decided that it was each of the following maladies: typhus, scarlet, putrid, yellow, camp, hospital, jail fever, scarlatina maligna, the black death, erysipelas, small-pox, the Oriental plague, some wholly extinct form of disease; each succeeding writer succeeds at least in throwing doubt on his predecessor's diagnosis. Lucretius' copy must manifestly be even more vague and inconclusive. The truth is, that having laid down his general principles of disease and vindicated his philosophy, he seeks now to satisfy his poetical feeling by a powerful and pathetic description, which he has plainly left in an unfinished state. He has been imitated in turn by Virgil (*Geor.*, iii. 478), closely by Ovid (*Met.*, vii. 523), by Livy more than once, and by others. The description of the plague of Florence in 1348, with which the *Decameron* opens, and that of Defoe of the Plague of London, are well known.—MUNRO.

Page 295.

“ Coming from Egypt’s borders far withdrawn.”

Egypt and Ethiopia, says Gibbon (Ch. xliii.), have been stigmatized in every age as the great source and seminary of the plague. In the damp, hot, stagnating air this African fever is generated from the putrefaction of animal substances, and especially from the swarms of locusts, not less destructive to mankind in their death than in their lives.

Lucretius makes the vitiated atmosphere of Egypt put itself in motion, and travelling over much sea and land at last arrives at Athens. Thucydides says no such thing. With his usual caution he tells us it began, *as was said*, in Ethiopia, and descended to Egypt and Persia, and suddenly broke out at Athens, beginning with the “Piræus,” so that possibly a ship carried it directly from Egypt. It appears that this terrific malady had been raging for some time throughout the regions around the Mediterranean, and about sixteen years before, there had been a similar calamity at Rome and in various parts of Italy.

Page 297.

“ Then many signs precursors were of Death.”

The symptoms that follow are not found in Thucydides; they appear, most of them at least, to be derived from the writings of Hippocrates, and not to have any special reference to this plague. Lucretius seems to forget for the time that he is describing the gradual progress of a disease in which some died and others recovered, as is told farther on; and to think only of drawing a moving picture of the signs of coming death.—MUNRO.

Page 297.

“ Or with the ninth they yielded up their life.”

He now returns to Thucydides, whose meaning he has in some points misapprehended, and introduced some circumstances not mentioned by him.

Page 300.

“ The stricken crowds of husbandmen poured in.”

The extraordinary accumulation of people within the city and long walls was in consequence of the Lacedæmonian invasion that at this time devastated Attica. This accumulation, and the mental chagrin from the forced abandonment and sacrifice of their properties in the country, transmitted the contagion with fatal facility from one to the other.

Page 300.

*“ Impending grief o’erpowered
All former feelings, habits, and regards.”*

The melancholy picture of society under the pressure of a murderous epidemic, with its train of physical torments, wretchedness, and demoralization, has been drawn by more than one eminent author ; but by none with more impressive fidelity than by Thucydides, who had no predecessor, and nothing but the reality to copy from. We may remark that amid all the melancholy accompaniments of the time, there are no human sacrifices, such as those offered up at Carthage during pestilence to appease the anger of the gods—there are no cruel persecutions against imaginary authors of the disease, such as those against the Untori (anointers of walls) in the plague of Milan in 1630.—GROTE, *Hist. of Greece*, vi. 132.

Page 300.

“ No decent rites of sepulture remained.”

Nothing could show more forcibly the weight of the calamity than this neglect of funeral rites by the Athenians, who of all people were the most scrupulous in their observance of them. The end of the poem is manifestly in an unfinished state. Some verses have no connection with the context, and it is not improbable they are incomplete sketches and marginal additions of the poet, which he intended but did not live to embody with the rest of the poem.

17K

16





LIBRARY OF CONGRESS



0 003 092 956 1